

3 1761 11969949 4

20N Z1  
-75V109

Govern  
Public



# THE ROYAL COMMISSION ON VIOLENCE IN THE COMMUNICATIONS INDUSTRY

## RESEARCH REPORT

VIOLENCE, THE MEDIA AND MENTAL DISORDER

Prepared by:  
John C. Renner, Ph.D.  
of  
A.R.A. CONSULTANTS LTD.

December 31, 1976

1976



PRE-PUBLICATION COPY


The views expressed in this report are those of the author and do not necessarily reflect those of the Royal Commission on Violence in the Communications Industry, whose conclusions will be presented in its Final Report.



VIOLENCE, THE MEDIA AND MENTAL DISORDER

Prepared by:  
John C. Renner, Ph.D.  
of  
A.R.A. CONSULTANTS LTD.

December 31, 1976



Digitized by the Internet Archive  
in 2024 with funding from  
University of Toronto

<https://archive.org/details/31761119699494>



# VIOLENCE, THE MEDIA AND MENTAL DISORDER

## TABLE OF CONTENTS

	<u>PAGE</u>
INTRODUCTION AND PURPOSE . . . . .	I-1
Purpose . . . . .	I-3
BACKGROUND AND RATIONALE . . . . .	II-1
Effects of Media Violence . . . . .	II-1
Mental Disorder and the Media . . . . .	II-9
WHAT IS ASSESSED . . . . .	III-1
The Field Survey . . . . .	III-2
Aggressive Attitudes . . . . .	III-3
Tolerance . . . . .	III-4
Anxiety . . . . .	III-6
Defensiveness/Victimization . . . . .	III-8
Accuracy of Perceptions . . . . .	III-9
Correlates vs. Effects . . . . .	III-10
Measuring Mental Disorder . . . . .	III-12
THE INTERVIEW PROCESS . . . . .	IV-1
Sampling Issues . . . . .	IV-1
Two-Phase Identification . . . . .	IV-4
Interview Administration . . . . .	IV-9
DESCRIBING THE INTERVIEWEES . . . . .	V-1
Age . . . . .	V-2
Sex . . . . .	V-3
Marital Status . . . . .	V-4
Education . . . . .	V-4
Race . . . . .	V-5
Housing . . . . .	V-6
Income . . . . .	V-6
Employment Status . . . . .	V-7
Occupation . . . . .	V-9
Health . . . . .	V-9
MEDIA USE . . . . .	VI-1
Television . . . . .	VI-1
Movies . . . . .	VI-6
Newspapers . . . . .	VI-9
Magazines . . . . .	VI-11
Radio . . . . .	VI-13
Overview . . . . .	VI-14



	<u>PAGE</u>
AGGRESSION AND ASSAULT . . . . .	VII-1
What is Measured . . . . .	VII-1
Mental Disorder . . . . .	VII-3
Media . . . . .	VII-5
Mental Health and the Media . . . . .	VII-7
Overview . . . . .	VII-9
 ANXIETY/CONCERN . . . . .	 VIII-1
Mental Disorder . . . . .	VIII-1
Media . . . . .	VIII-2
Mental Health and The Media . . . . .	VIII-4
Overview . . . . .	VIII-5
 VICTIMIZATIONA/DEFENSIVENESS . . . . .	 IX-1
Mental Disorder . . . . .	IX-1
Media . . . . .	IX-2
Mental Disorder and Media . . . . .	IX-4
Overview . . . . .	IX-4
 TOLERANCE . . . . .	 X-1
Mental Disorder and Media . . . . .	X-1
Overview . . . . .	X-2
 ACCURACY OF PERCEPTIONS . . . . .	 XI-1
Mental Disorder . . . . .	XI-3
Media . . . . .	XI-4
Mental Health and the Media . . . . .	XI-6
Overview . . . . .	XI-9
 OVERVIEW AND CONCLUSIONS . . . . .	 XII-1
Purpose . . . . .	XII-1
Outcomes . . . . .	XII-2
Conclusions . . . . .	XII-5
Other Effects . . . . .	XII-8
Television Viewing . . . . .	XII-10
 R E F E R E N C E S	

The Royal Commission on Violence - How We Define Violence .	Appendix A
Screening Interview . . . . .	Appendix B
Survey Questionnaire . . . . .	Appendix C





EXHIBITSEXHIBITOPPOSITE PAGE

1	Mental Disorder and Age . . . . .	V-2
2	Sex and Marital Status . . . . .	V-4
3	Education . . . . .	V-4
4	Race . . . . .	V-5
5	Housing . . . . .	V-6
6	Mental Disorder and Level of Income . . . . .	V-6
7	Employment Status at the Time of the Interview . . . . .	V-7
8	Sex and Employment Status . . . . .	V-7
9	Mental Disorder and Employment Status . . . . .	V-8
10	Mental Disorder and Period of Unemployment . . . . .	V-8
11	Occupation at the Time of the Interview . . . . .	V-9
12	Mental Disorder and Seeking Mental Health Assistance . . . . .	V-10
13	Severity of Mental Disorder . . . . .	V-11
14	Mental Disorder and Seeking Assistance for Family Problems . . . . .	V-12
15	Hours of Television Watched per Day . . . . .	VI-2
16	Television Viewing and Educational Level . . . . .	VI-2
17	Discriminant Analysis: Television Violence . . . . .	VI-3
18	Type of Television Shows Mentioned . . . . .	VI-4
19	Mental Disorders and Soap Operas . . . . .	VI-5
20	Hours of Television Viewing and Crime Shows Mentioned . . . . .	VI-5
21	Hours of Television Viewing and Comedy Shows Mentioned . . . . .	VI-6
22	Frequency of Movie Theatre Attendance . . . . .	VI-6
23	Frequency of Television Viewing and Movie Attendance . . . . .	VI-6
24	Discriminant Analysis: Frequency of Movie Attendance . . . . .	VI-7
25	Type of Movie Mentioned . . . . .	VI-8
26	Type of Violent Theme in Movies Cited . . . . .	VI-8
27	Frequency of Newspaper Reading . . . . .	VI-9
28	Preferred Section(s) of the Newspaper . . . . .	VI-9
29	Name of Newspaper(s) Read . . . . .	VI-9
30	Number of Different Newspapers Read . . . . .	VI-10
31	Discriminant Analysis: Newspaper Reading . . . . .	VI-10
32	Frequency of Magazine Reading . . . . .	VI-11
33	Types of Magazines Mentioned . . . . .	VI-11
34	Number of "Usually Read" Magazines Mentioned . . . . .	VI-11
35	Frequency of Television Viewing and Magazine Reading . . . . .	VI-12
36	Frequency of Movie Theatre Attendance and Magazine Reading . . . . .	VI-12
37	Discriminant Analysis: Magazine Reading . . . . .	VI-12
38	Frequency of Radio Listening . . . . .	VI-13
39	Radio Programs Mentioned . . . . .	VI-14
40	Discriminant Analysis: Radio Listening . . . . .	VI-14
41	Aggressive Attitudes Items . . . . .	VII-2
42	Mental Disorder and Aggressive Attitudes . . . . .	VII-3
43	Mental Disorder and Fighting Behaviour . . . . .	VII-4
44	Mental Disorder and Arrest Records . . . . .	VII-4
45	Television Viewing and Aggressive Attitudes . . . . .	VII-6
46	Television Viewing and Enjoyment Through Aggression . . . . .	VII-6
47	Television Viewing and Fighting . . . . .	VII-6





<u>EXHIBIT</u>	<u>EXHIBITS</u> <u>Cont'd.</u>	<u>OPPOSITE PAGE</u>
48	Television Viewing and Arrest Record . . . . .	VII-7
49	Television Viewing and Reports of Friends Being Arrested. . . . .	VII-7
50	Television Viewing and Violence of Friend's Crime . . . . .	VII-7
51	Analysis of Variance: Aggressive Attitudes and Television Viewing . . . . .	VII-8
52	Analysis of Variance: Aggressive Attitudes and Movie Attendance . . . . .	VII-8
53	Analysis of Variance: Aggressive Attitudes and Newspaper Reading . . . . .	VII-9
54	Anxiety/Concern Items . . . . .	VIII-1
55	Mental Disorder and Level of Anxiety . . . . .	VIII-1
56	Mental Disorder and Mugging . . . . .	VIII-2
57	Television Viewing and Anxiety . . . . .	VIII-2
58	Television Viewing and Personal Safety . . . . .	VIII-3
59	Movie Attendance and Anxiety . . . . .	VIII-3
60	Movie Theatre Attendance and Worries About Neighbourhood Dangers . . . . .	VIII-3
61	Magazine Reading and Anxiety . . . . .	VIII-4
62	Analysis of Variance: Concern/Anxiety and Television Viewed . . . . .	VIII-4
63	Analysis of Variance: Concern/Anxiety and Movie Attendance . . . . .	VIII-5
64	Analysis of Variance: Concern/Anxiety and Newspaper Reading . . . . .	VIII-5
65	Victimization/Defensiveness Items . . . . .	IX-1
66	Defensiveness Items: Individual Analysis . . . . .	IX-2
67	Mental Disorder and Owning A Weapon . . . . .	IX-2
68	Television Viewing and Victimization/ Defensiveness . . . . .	IX-2
69	Television Viewing and Attitudes of Victimization . . . . .	IX-2
70	Movie Attendance and Victimization/ Defensiveness . . . . .	IX-3
71	Movie Attendance and Attitudes of Victimization . . . . .	IX-3
72	Movie Attendance and Perceived Need for Protection . . . . .	IX-3
73	Analysis of Variance: Victimization/Defensiveness and Television Viewing . . . . .	IX-4
74	Analysis of Variance: Victimization/Defensiveness and Movie Attendance . . . . .	IX-4
75	Tolerance Items . . . . .	X-1
76	Accuracy Items: Media Vs. Reality . . . . .	XI-2
77	Accuracy Items: Estimating Crime . . . . .	XI-2
78	Mental Disorder and Perceptions of Violent Involvement . . . . .	XI-3
79	Television Viewing and Perceptions of Numbers of People Involved in Violence . . . . .	XI-4
80	Television Viewing and Perceptions of Violent Crime . . . . .	XI-4
81	Television Viewing and Perceptions of Lifestyle . . . . .	XI-5
82	Television Viewing and Accuracy of Perceptions . . . . .	XI-6
83	Analysis of Variance: Accuracy on Perceptions and Television Viewing . . . . .	XI-6



<u>EXHIBIT</u>	<u>EXHIBITS</u> Cont'd.	<u>OPPOSITE PAGE</u>
84	Analysis of Variance: Accuracy on Perceptions and Movie Attendance . . . . .	XI-7
85	Analysis of Variance: Estimating Crime Levels and Television Viewing . . . . .	XI-8
86	Analysis of Variance: Accuracy on Perceptions and Movie Attendance . . . . .	XI-8



## INTRODUCTION AND PURPOSE

Most of us are very non-violent people. We seldom beat our children unnecessarily. Even more rarely do we arrange for the assassination of a troublesome business competitor. During the heat of war-time battle, the overwhelming majority of infantry men do not discharge their weapons, let alone try to shoot someone.<sup>1</sup> In ghetto riots, the proportion of residents who are "on the street" burning, vandalizing and looting has been shown to be extremely small.<sup>2</sup>

We are nonetheless, fascinated by violence. Virtually any portrayal, display or simulation of violence will attract avid audiences. Violence excites, alerts and entertains us.<sup>3</sup> This fascination has not gone unnoticed. If you drive, you have been caught in traffic jams caused by drivers who slow down to look at accidents which have taken place in the opposite lane. If you are movie producer, you have been aware of the box office receipts earned by such movies as The Godfather, The Exorcist, and Jaws.<sup>4</sup> If you are a television producer, you know that one of the keys to raising the rating on your show is to increase the amount of violence.<sup>5</sup> It has even been suggested that the game of hockey has become more violent not because fist-fights on the ice help to better display the athletes' skill in the game, but because such displays increase the size of the viewing audience.<sup>6</sup>

The simple truth is that media audiences give every indication of being fascinated by portrayals of violence. The economics of media survival have dictated that this simple truth be cultivated, cultured and otherwise exploited until consumer interest simply collapses from exhaustion.<sup>7</sup>

At the present time, the only evidence of exhaustion or satiation appears to be coming from censorship boards and laws.<sup>8</sup>

In the last few decades, the impact of media violence upon attitudes and behaviours of viewers has become a world-wide concern. Mental health experts, researchers, and concerned parents have expressed sufficient consternation concerning the matter that many countries have established formal research review committees to examine existing knowledge, collect additional data, and draw up possible recommendations and controls.<sup>9</sup>

In research of this nature, the research problems are always exceedingly complex. Conclusions must be drawn from piecing together the results of many individual research projects. Also, the stakes involved in recommending changes to the status quo are immense whether one is concerned primarily about the economic, the political, or the social perspective.

Most of the research in this field has centered on two issues. The first issue is always one of whether the depiction of violence in the media has any discernable impact upon the "average" person. The second is the question of whether or not media violence has any discernable impact upon any significant segment of society.

In the present research project, the emphasis is upon the latter question. More specifically, the particular segment of society examined consists of those individuals who are mentally disordered. That is to say, these are the individuals who show symptoms of being excessively irritable, anxious, depressed or confused. They would be viewed as "needing treatment" by most clinical psychiatrists and



psychologists. They also, for the most part, are individuals who are not in institutions and are not - in fact - under any treatment at all for their mental state.

### PURPOSE

The purpose of this study is to compare mentally disordered individuals and a comparison group of normal individuals on their beliefs and attitudes with respect to violence.

Numerous researchers have suggested and demonstrated that the manner in which an individual responds to, or thinks about, violence is related to the amount and type of media fare to which he or she is exposed, or prefers.<sup>10</sup> Thus, the media consumption patterns of the mentally disordered group and the comparison group will be studied to identify similarities and differences.

It should be emphasized that this project has not been designed to demonstrate a cause-and-effect relationship between exposure to media violence and personal reactions to violence. Rather, the intent is to examine the existence of relationships between such combinations of variables as media preference, reactions to violence, and degree of mental disorder.

## BACKGROUND AND RATIONALE

The purpose of the project is clear. However, what evidence is there that media affects anybody, let alone the mentally disordered? Also, it has been suggested that a considerable amount of research has already been carried out on this topic of media violence - so why have not the effects upon the mentally disordered been studied, if, indeed, they constitute a worthwhile population for investigation?

### EFFECTS OF MEDIA VIOLENCE

As of this writing, there have been several thousand research projects carried out which have investigated the impact of media violence. There are a number of excellent sources to which the reader may care to turn if a detailed exposition of these findings is desired.<sup>1</sup> To put the research findings into perspective, it is helpful in this case to relate the issue being studied to one's own personal experiences with media violence. Reverence for research has its place. When topics deal with phenomena which are beyond our own personal range of experience - such as the design of an atomic reactor, or the speed of light in a vacuum - most of us act like spectators at a tennis match when we observe two researchers in fields such as these engage in heated argument.

On the other hand, much of the existing social science research is built upon a groundwork of principles, practices and experiences which many of us share. In short, it makes more sense to argue with a social science researcher about the definition of aggression than it does to argue with a medial researcher about the

best way to identify the presence of certain bacteria.

Personal  
Experiences

Do you read to your child at his or her bedtime? If you do so, do you avoid going into vivid descriptions of horrible monsters which might conceivably lurk in little children's bedrooms at night? It would seem that many parents take such precautions. Few people would question the fact that, at least among young children, the line between fantasy and reality, or the dream world and the real world, becomes easily blurred - particularly in the dark.

In fact, it is ironic that the first form of censorship to which most of us are exposed has to do with violence rather than sex. This order of affairs usually reverses dramatically as we begin to mature.

When children become old enough to attend movies, it becomes quickly apparent that the children's needs and interests are often different from those of the parent. To be entertained is to be stimulated. Love stories seldom do that for children, but horror stories certainly do. There are few people who do not recall that one of their more exhilarating experiences of youth involved walking past a vacant lot or into a darkened bedroom after seeing a particularly terrifying horror movies.

Kids will be kids, but don't most of us grow out of this? There is no particularly good answer to that. Certainly most adults watch horror movies without being scared. But, how many of us are still

afraid of the dark? And, what about the effects of adult horror movies?

After The Exorcist was shown, many adults slept with their lights on, or did not sleep at all. The impact of the movie was duly noted in a nation-wide news magazine.<sup>2</sup> Psycho was another highly popular horror movie. In one scene, a woman was senselessly and violently stabbed to death in her shower by a madman. Are there still adults who, feeling rather foolish, still lock their doors when they take a shower?

A recent movie by the name of Jaws vividly depicted the appetite and eating habits of a giant shark. The movie was a box office "hit" and its impact was registered, once again, in a nation-wide news magazine.<sup>3</sup> It was reported that resort owners noted a distinct reluctance on the part of their guests to leave the poolside for the ocean-side. Giant shark jokes, shark medallions and plastic blow-up sharks appeared everywhere. Friends explained to one another that for a while they would be taking showers rather than baths.

Is it the case that some viewers of this movie are still reluctant to swim in the ocean? If so, how does this anxiety affect one's self-image? Does this foolish feeling of anxiety have other "spin-off" affects, such as raising the individual's anxiety level concerning other aspects of his or her life?

There are no firm research answers to such questions. It feels comfortable for most of us to say that "the average person" has outgrown such fears. It probably feels a bit more uncomfortable to replace that term "average person" with "everybody".

In short, most of us have had personal experience with the manner in which media presentations can affect our beliefs, our attitudes and our behaviours. If we have not experienced this as an adult, we have surely experienced it as a child. If we do not experience it now, we probably know other adults who do experience it.

The media in North America, and in most of the rest of the world, have long been subject to various types of formal or informal censorship rules.<sup>4</sup> It is probably safe to say that the rules emerged independent of any research findings to justify them.

By the 1930's researchers had concluded that crime movies should not be shown to delinquents or adult offenders. It was felt that such movies created attitudes and perceptions that contributed further to criminal behaviour.<sup>5</sup> In the 1950's, the research evidence and the weight of professional psychiatric opinion were sufficiently strong that the comic book industry was persuaded to set up and enforce a code of standards which drastically circumscribe to the types and amount of violence which they could depict.<sup>6</sup>

With the advent of television, motion picture dealers began to face strong competition for the viewing public. In the race for survival, both of these multi-million dollar industries tried to outpace the other in competition for the public's purse.<sup>7</sup>

Researchers who became interested in studying the impact of violence upon the attitudes and behaviours of viewers, did not suffer from a lack of appropriate media materials.

In recent years, the stupefying quantity and quality of violence being depicted in the media has been a noticeable concern of most countries of the industrial world. In the late 1960s, a National Commission on the Causes and Prevention of Violence was formed in The United States. Among other activities, experts reviewed the existing research in the media violence field. In the report of this Commission, it was stated that "the constant diet of violent behaviour on television has an adverse effect on human character and attitudes. Violence on television encourages violent forms of behaviour and fosters moral and social values about violence in daily life which are unacceptable in a civilized society."<sup>8</sup>

Such a conclusion challenged the very life blood of the media. The findings were challenged, and violence in the media continued to mount.<sup>9</sup>

Finally, in the early 1970s, the Surgeon General of The United States' Department of Public Health initiated a program to examine the impact of television on social life. Experts once again carefully reviewed the existing research on the relationships between media violence and attitudes and behaviour. Then, new research projects were initiated to "fill in" the gaps identified by the reviewers. Seven volumes of reports and \$2 million later, the massive research project was completed.<sup>10</sup>

Dr. J. Steinfield was the Surgeon General at the time this project was done. He states, "The overwhelming consensus and the unanimous scientific Committee's report indicate that televised violence, indeed, does have an adverse effect on certain members of our society . . .".<sup>11</sup>



It should be noted that the above quote - as definite as it sounds - is surrounded by qualifications. There were always alternative arguments - even when one had the "facts" in hand. In England, and France, in Sweden and in the United States, government committees have been commissioned to examine the issue of violence in the media and to make recommendations.<sup>12</sup> In every case, the committees carefully qualified their responses to reflect the ambiguities in the evidence. They all conclude however, that violence in the media can, at least for certain people, have adverse effects.

An example of a carefully qualified conclusion drawn directly from the U.S. Surgeon General's reports follows:

"... there is a convergence of the fairly substantial experimental evidence for short-run causation of aggression among some children by viewing violence on the screen and the much less certain evidence from field studies that extensive violence viewing preceded some long-run manifestations of aggressive behaviour. This convergence . . . constitutes some preliminary indication of a causal relationship . . .".<sup>13</sup>

In North America, the effect which these findings have had upon the production and presentation of media violence has been very slight indeed. The frustration of one reviewer in this field is aptly stated:

"For years defenders of the media have successfully exercised extraordinary argumentative gymnastics, syllogistic contortions and theoretical circumlocutions to give complicated and evasive answers to simple questions about media violence. Problems which common sense can master are transformed into insoluble abstract labyrinths and matters only for wild philosophical conjecture. Unfortunately, these confusion tactics work quite effectively, leaving the layman dizzy from the mass of contradictory evidence and inclined to believe that no action is advisable when the problem seems so uncertain."<sup>14</sup>

Some of the researchers who contributed to the Surgeon General's project in the United States have adamantly and aggressively stated their own opinions:

" . . . laboratory studies, correlational field studies, and naturalistic experiments all show that exposure to television can, and often does, make viewers significantly more aggressive . . .".<sup>15</sup>

#### Research Conclusions

In defence of the media, it should be pointed out that there are literally thousands of research studies which examine the relationship between media violence and viewer attitudes and behaviours.<sup>16</sup>

By no means, does all of the research suggest that the effects of media violence on viewers are entirely, or even partially, adverse. On issues such as this, one must look for the weight of evidence.

Given all that is known - and being fully aware that no one ever has all the facts necessary - at what conclusion do we arrive? Percy Tannenbaum, an internationally known and respected research psychologist, was asked by the National Commission on the Causes and Prevention of Violence to comment upon the quality of media violence research and the conclusion drawn by the Commission. Dr. Tannenbaum stated:

"The verdict is not proven. I don't think it will be proven in my lifetime, certainly not in the lifetime of this Commission and if that is what you are looking for, I think you had better stop now. . . . so many of the government's actions and even society's actions, are dictated by having to make, because of the exigencies of the situation, a calculated guess, on the basis of whatever evidence we have in hand."<sup>17</sup>

## Room for Consensus

The weight of the evidence suggests that government committees, independent researchers, and even media spokesman would agree on at least one point. That is, under some conditions, for certain people, media violence can have clearly adverse effects. So can an over-indulgence in sweets or alcohol.

The agreement is there; the controversy centres upon the solution of a grizzly calculus. That is, how many people affected? and how adversely? in protecting one group in society, what damage, inconvenience, or rights does one infringe upon among other members of society? Under the circumstances, one can hardly fault decision makers - whether on the media side or the government side - in making haste slowly.

One of the areas for special concern is children. This represents an important "some of the people, some of the time" population.

The reasons for concern are obvious. The value system, beliefs and habits of children are widely considered to be more readily subject to change and manipulation than are those of adults.<sup>18</sup> Also, children spend between  $\frac{1}{4}$  and  $\frac{1}{2}$  of their waking hours watching television.<sup>19</sup> Thus, it is neither unreasonable nor surprising that researchers have devoted considerable time to examining both the short-term and long-term impact of various types of media content on children.

George Comstock has carried out extensive bibliographic collections and interpretations of research on the impact of television.<sup>20</sup> He cites numerous research projects to substantiate such statements as the following:<sup>21</sup>

- "- the observation of television portrayals can alter the balance between the inclination to perform an act and the inhibitions against such performance on the part of adolescents. Although most of the evidence to-date concerns the disinhibition or stimulation of aggression, there is little reason to think the same effect would not occur for other classes of behaviour
- the trend of evidence reverses early findings that television violence reduces aggression among young people by inducing catharsis, although there are circumstances in which the observation of violence will lower aggressiveness
- the behaviour observed on television becomes acquired or learned by young children in the absence of immediate practice or reinforcement, and such acquisition occurs in regard to a variety of classes of behaviour, including socially desirable as well as aggressive behaviour.
- exciting television content of a wide variety of classes (of which violence is only one example) can probably activate or stimulate behaviour which otherwise would not be expressed or would be expressed at a lower level."

Simply because so much research has been done on children, there is a temptation for those in the field to extrapolate from the findings concerned with children to predictions of adult behaviours and attitudes. In fact, in the present project, an extrapolation has been made from the findings on mentally disordered children to predictions concerning mentally disordered adults. This is because the research examining relationships between mental disorder and media effects has mostly been done with children. Even this data is extremely scanty.<sup>22</sup> Most researchers have concentrated their efforts upon groups of "normal" children, at best showing only a casual interest in a few mentally disordered children they might encounter.

#### MENTAL DISORDER AND THE MEDIA

In England, a governmental committee charged with the responsibility of reviewing the research in the field of media violence,

concluded the following:

"... for some people violence in the media can be unhealthy and detrimental. The difficulties of the frustrated, mal-adjusted and isolated can be intensified and already existing deviant behaviour patterns may be reinforced."<sup>23</sup>

This position was reflected in a statement by the Airline Pilots' Association in which they were trying to urge cancellation of a film called The Doomsday Flight. This film depicted a hijacking technique which obviously had some appeal to viewers. It seems that whenever it was shown, a hijacking would occur shortly thereafter, using the technique described in the film. The Airline Pilots' Association urged cancellation of the film arguing that "...the mentally unstable are highly responsive to, and usually provoked by, suggestion".<sup>24</sup>

In another review of the media violence literature, the author discusses the impact of television on selected groups. He concludes that "the most complacent of them (social scientists) would admit that some individuals - the mentally unstable, the ultra-sensitive, the profoundly ignorant - react to the small screen in a different way from the norm".<sup>25</sup>

In concluding that there is a clear and undesirable relationship between media impact and mental disorder, he points out that he is talking about more than just a few unstable individuals in society. He notes that in at least one study, it was demonstrated that no less than 23.4% of the population suffered from mental symptoms which were rated by psychiatrists as being "marked", "severe", or "incapacitating".<sup>26</sup>



Looking more specifically at children, Dr. Mark Abrams has stated that:

"The available evidence from research on these points among (ordinary, average) children is slight and often negative. It appears that when mal-adjusted and well-adjusted children are exposed to identical amounts of violent mass media content, the former, unlike the latter, show a marked preference for such material, derive distinct satisfactions from it, and in the process of consumption, their problems are sustained rather than resolved." <sup>27</sup>

In short, Dr. Abrams interprets the existing research literature as being inconclusive with respect to the "average" child - but nevertheless feels strongly concerning the effects upon those who are disturbed. He goes on to state that, "Since media violence, in some way as yet unknown to us, apparently intensified the difficulties of maladjusted and frustrated children, a strong case can be made for removing such material." <sup>28</sup>

Comments concerning this special susceptibility of the mentally disordered are fairly common in the literature. For example, Himmelweit carried out research on the impact of media violence on children. She concludes that, "We did not find that the viewers were any more aggressive or maladjusted than the controls. Television is unlikely to cause aggressive behaviour, although it can precipitate it among the few children who are emotionally disturbed". <sup>29</sup>

In the book, Violent Conflict In American Society, the author, Iglitzin states that "Statistics on mental illness, juvenile delinquency and drug use indicate the large number of people who are experiencing forms of social maladjustment and who are consequently vulnerable to the appeal of mass violence." <sup>30</sup>



One researcher has actually attempted to assess the level of mental disorder in his adult population of subjects and relate this to perceptions of violence on television.<sup>31</sup> In this project, all participants were assessed as to their level of "fearfulness", "aggressiveness" and "neuroticism". Again, however, since this project was carried out on a random sample of the adult population, only a few of the total number of respondents could genuinely be considered to show any significant signs of disorder. Also, as in other projects in which the disordered individuals are not the major population being studied, the numbers of responses from such a small sub-group cannot be adequately subjected to statistical analysis.

In the above study, adults who were shown to be excessively fearful were usually those who expressed the greatest concern about the amount of violence on television programs. On the other hand, those who were assessed as being extremely aggressive, were least likely to consider much of what they watch as violence at all. The researcher states that:

"...these data do not constitute conclusive evidence, they lend support to the common-sense view that reactions to portrayals of violence are . . . a function of the viewers' personality, the violent images presented on the television screen feeding the fears of the fearful but often falling short of the perception threshold of the aggressor."<sup>32</sup>

Thus, what we know about the relationship between mental disorder and media violence has been limited by two factors. First, the number of mentally disordered individuals actually studied has always been extremely small. These have usually merely constituted those few individuals out of a larger population of normal subjects being studied by the researcher. Thus, existing conclusions about

the mentally disordered are based on very few observations.

The second problem is that most of the conclusions concerning the relationships between mental disorder and media violence are based upon extrapolations from the observations of children, rather than adults.

Finally, it should be noted that the severity of mental disorder is an important issue, but one which is seldom given serious consideration by the authors quoted in the preceding paragraphs. For purposes of this project, the mentally disordered population of interest consists of those individuals who are not institutionalized. This population does not then include those most seriously disordered individuals. It is, however, a population which is sufficiently large to be of serious social concern.

#### Why the Delay?

In the past, government committees, researchers, and laypersons have readily made statements concerning the impact of media violence upon the mentally disordered. There has been very little data to support their conclusions. And, the available data has been suspect, both in terms of absolute numbers of individuals being studied, and in terms of extrapolations being made from children to adults.

The proportion of non-institutionalized, mentally disordered individuals in the population is not small. In recent decades, a considerable amount of research has been devoted to identifying the incidence of mental disorder in North American populations.<sup>33</sup> The range of estimates, based on field research, is wide. However, most researchers would probably agree that the figure of approximately 15% of the general population would constitute a reasonable estimate.

The incidence research which has been carried out to date has always been plagued by problems of resources and method. To identify the number of mentally disordered individuals in the community, the best way is to interview every single individual living in that community. This is a very expensive process, and not very many researchers can afford to use it. The alternative is to use a sampling technique. However, because of some very special characteristics of the population being studied, researchers have always found one another's sampling methods to be subject to severe criticism.<sup>34</sup>

It is interesting to note that, to date, the research done on the non-institutionalized mentally disordered has not gone far beyond the basic issue of counting. That is, most people have simply been interested in determining what percentage of the total population are mentally disordered to a mild, severe, or incapacitating degree. Sampling procedures are usually so expensive and time-consuming that there has generally been little effort directed towards the collection of additional information from this population.

### III- WHAT IS ASSESSED

Frequent reference has been made to the concept of "media effects". The purpose of this chapter is to clarify precisely which effects will be studied, and how the effects are assessed.

At this point, it is also worthwhile to clarify the definition of violence being used for this project. According to Webster's International Dictionary "violence is a force which injures or abuses".<sup>1</sup> Such a meaning of violence includes both personal injury and property damage.

The above constitutes a brief definition of the manner in which the term violence will be used in this report. It is of course recognized that not everyone uses the term in the same fashion. The more extensive definition of the term violence (Appendix A), which has been formulated by the Royal Commission on the Study of Violence in the Communications Industry, is much more detailed and comprehensive than the Webster's definition. This definition, as used by the Royal Commission, is not at all in conflict with the manner in which the term "violence" is used throughout this report.<sup>2</sup>

In studying the effects of media violence, research emphasis has always been placed upon the tendency of such media portrayals to induce viewers to act in a more violent fashion than they otherwise would. Of course, the fact is that there are many possible different effects of media violence. In an earlier chapter, for example, it was pointed out that seeing horror shows is probably less likely to induce violence than it is to induce feelings of irrational fear or anxiety.

Not all of the effects of violence can be either easily measured or easily separated one from the other.

### THE FIELD SURVEY

The data for this project is collected by means of a field survey. One of the limitations of this technique is that few people will tolerate being interviewed for more than one hour. Therefore, the amount of information which can be collected from any one individual is limited. Second, interviews often take place under semi-private circumstances or under circumstances where there are numerous distractions. These are not insurmountable problems, as far as encouraging interviewees to speak is concerned. However, these limitations combined with the limited interview time available, means that the number of different concepts one can attempt to measure precisely in any single interview, are bound to be limited. In the social sciences, the accuracy with which a concept is measured is usually a direct function of the amount of time the assessor has, and the amount of attention that the interviewee is willing to devote the project at hand.

In field surveys then, there are always some limitations as to the precision with which one can measure concepts, and the absolute number of concepts which can be assessed at any one interview.

Of course, the major advantage of field surveys, and the reason why they are used so extensively, is that one can collect information on large numbers of individuals. This is essential if one is to generalize from the findings which emerge from the sample of individuals being interviewed, to the larger populations from which they may be drawn.

The effects studied include the following:

- aggressive attitudes and actions
- tolerance or accepting attitude concerning violence
- anxiety or fearfulness concerning violence
- defensive or "victim-like" actions to cope with violence
- distorted beliefs or perceptions concerning the realities or facts about violence-related issues.

Each of these effects will be briefly discussed below.

#### AGGRESSIVE ATTITUDES

One of the effects assessed is the degree to which a respondent indicates aggressive or assaultive attitudes or habits. That is, does he or she "blow up" when someone irritates them? Does the individual feel that many of the problems with people could be solved by simply acting in a more assaultive or aggressive fashion? Has this individual ever been arrested or has he or she engaged recently in physical fights with spouses, friends, or strangers?

There is evidence to demonstrate that assaultiveness or aggressiveness might be an outcome of viewing media violence. First, it has long been known that children who observe films of violence are, immediately thereafter, more likely to act in an aggressive fashion toward others than are viewers who had observed a non-aggressive film.<sup>3</sup>



Researchers now generally agree that, for both children and adults, observing media violence under the right conditions increases the tendency of the viewer to act in an aggressive fashion.<sup>4</sup> There is still considerable controversy as to how long these effects last. Most important, it is not at all clear just how aggressive the viewer becomes. That is, will media violence push someone into acting in an aggressive fashion which is completely inappropriate to the situation at hand - or is it just likely to make them act a bit more aggressively than they normally would?

The present study attempts to assess a mental state, attitude, or readiness to engage in aggressive activity. There is no opportunity to observe the interviewee's aggressiveness "in action". These self-reported attitudes are, however, supplemented by reports from the interviewee concerning his or her history of violence. That is, each individual is asked about recent physical fights, trouble with the law, and type of crime (e.g. violent or non-violent) for which he or she may have been arrested.

### TOLERANCE

A number of writers and researchers have suggested that with continual exposure to media violence, it may be the case that viewers are simply learning to tolerate and accept such media fare.<sup>5</sup> For example, some researchers have noted that after viewing violent portrayals on film, children were much less likely, immediately thereafter, to attend to, or try to stop, real violence in their immediate environment.<sup>6</sup> Also, it has been noted that among those television viewers who watch a lot of violence on television, there is much less evidence of physiological arousal and attention to depictions of violence on film, than

among those individuals who do not normally watch such fare.<sup>7</sup>

If the media do induce an increased tolerance for violence in real life, the implications for society are decidedly unpleasant. In fact, the case in which a young woman was beaten and stabbed repeatedly in full view and hearing of other residents of her apartment, generated nation-wide news coverage and attention.<sup>8</sup> It was clear from this incident, and subsequent interest in research on this matter, that the general public reacts with horror at the thought of their fellow citizens becoming inured to violence in their surroundings.

Of course, in the present project it is not possible to actually observe individuals being tolerant or apathetic toward violence around them. It is, however, possible to assess their attitudes with respect to this issue. For example, do they feel bored or disinterested with the deaths, and "sob" stories of victims and survivors depicted in the media? Do they think that people should mind their own business - so that if a man wants to beat his wife, that's their own problem? Do they just accept the fact that organized crime is going to continue to grow and that there is not much anyone can do about it?

It should be recognized, after all, that an attitude of tolerance or apathy is a very common technique which individuals use to cope with personal problems that they can't seem to solve. If your boss upsets you, and you can't seem to change the situation, then you might just "learn to accept it".

In its extreme sense, tolerance can even lead to positive acceptance. For example, an advertiser might choose to flood the media with an advertisement. It may appear so frequently that it becomes

irritating. However, you eventually learn to tolerate the advertisement, then, when you go to make the purchase, the name of that particular product may be the only one which "comes to mind". Similarly, a person repelled by media violence may watch it to keep a spouse company - and become not only desensitized to - but a fan of, Starsky and/or Hutch.

### ANXIETY

Tolerance, as an adaptation to violence, is socially undesirable. However, the payoff at a personal level of this type of coping response is rewarding, at least in the short term.

Of course, it is also quite common for people to develop response patterns which are personally counter-productive. Anxiety is a near-universal response to stressful circumstances. It brings with it so much grief, and so much interference with decision-making, memory, and skilled behaviours that it has been extensively studied.<sup>9</sup>

It is known that in the face of all "reason" and/or repeated contacts, that a state of anxiety can become intensified and become ever more debilitating for an individual. For example, as any student will attest, simply taking more tests does little to reduce one's anxiety about taking tests. Even doing well on tests seldom, in itself, helps students reduce their level of test anxiety.<sup>10</sup>

With respect to the media, it is a well-known technique among researchers to increase the anxiety of viewers for research purposes by simply showing them a violent film.<sup>11</sup> As in most common laboratory manipulations, it is generally believed that the long-term after effects of such experimental manipulation of the subjects emotions is not really

a matter of concern. This is assuming of course, that the subject with whom the researcher is dealing appears, in all respects, to be normally adjusted. As a matter of common sense and proper ethical practice, no serious researcher would consider attempting such manipulations if the subject gave any evidence of being mentally disordered (unless this subject population were actually being studied, and the researcher was qualified as a clinical therapist to deal with the possible after-effects of such manipulations).

It is quite conceivable that exposure to media violence can induce, in some viewers, feelings of heightened anxiety. As mentioned earlier, this is certainly the case for many individuals who watch horror movies.

For some individuals, the anxiety response is tied quite specifically to a particular occasion or thing. For many other individuals however, the anxiety response is a basic personality pattern. For such persons, anxiety experienced in one aspect of life tends to "leak over" into an individual's general outlook on life and his or her responses in other situations.<sup>12</sup>

With respect to the impact of media violence, it is feasible then that this would raise the level of anxiety of viewers. Of course, in this survey, we do not actually take physiological measures or observations while the interviewee is watching or reading about violence in the media. Rather, the respondent's general level of anxiety and fearfulness with respect to violence are assessed. For example, does the respondent feel that all apartments should have well-trained guards to control who comes in and out? Is it possible

that anyone, even your own neighbour, could be the sort of person who turns out to be arrested for a mass killing? Are there more crimes being committed than the police and the media are really telling us about?

It is important to note that at this level, there is only an attempt to identify fearfulness or anxiety without respect to whether or not the individual actually does anything about these feelings. For example, a woman may feel quite fearful about the prospect of having to walk down a "perfectly safe" street at night. Whether or not she actually lets herself be inconvenienced by this fear - that is whether or not she actually takes action based on her feelings - is another dimension to be studied here, which is called "defensiveness or victimization".

#### DEFENSIVENESS/ VICTIMIZATION

Researchers have noted that media violence can influence individuals in such a way that they actually learn how to become proper victims of violence and willingly inconvenience themselves to fit their perceptions of the dangers in society around them.<sup>13</sup>

For example, we all learn that during a robbery, the correct procedure to avoid injury or death is to passively comply with the robber's demands. The better we learn our role as a victim, the more easily and with less danger, can the robber pursue his career. While learning the victim's role has distinctive implications for personal survival and health, it does little to discourage the spread of crime violence in society.



On a more constructive note, individuals are likely to take evasive or protection action which may inconvenience them, but which helps protect them from possible encounters with violence.

One of the effects of media violence then, might be to encourage people to take defensive actions or to express an acceptance of the victim's role if they encounter violence. In this study, these attitudes are assessed by asking respondents if, for example, they sometimes avoid going out to the theatre or to a friend's house because they might encounter a mugger. Are they seriously considering, or do they already have, a weapon to protect themselves or a burglar alarm? Should people learn techniques of self-defence?

Responses to such questions depend, to a considerable extent, upon how much violence the respondent actually believes there is in society. That is, if he or she feels that violent crimes occur relatively frequently, then it seems reasonable to expect that such individuals will take more defensive actions than those who feel that their chances of being involved in crime are rather slight. This issue of the "accuracy of perception" is another area to be studied.

#### ACCURACY OF PERCEPTIONS

Researchers have pointed out that the environment as presented on television differs in some significant ways from the environment which most of us encounter in our everyday lives. For example, the so-called "average" family portrayed on television would actually have to earn the income of an upper-middle class individual in our society to actually own the material possessions which they do. Also, many



more of those average families portrayed on television are headed by a professional, or an executive or business manager than would actually be the case in our own environment. Police and criminals are obviously over-represented on television. Also, in real-life the percentage of crimes which are violent crimes is relatively small - but this is not the case for the types of crimes dealt with on television. In fact, of course, the actual incidence of violence is much over-stated on television.<sup>14</sup>

If one's views on the environment are actually shaped by the depiction of the environment presented in the media, then beliefs such as those noted above can be assessed and compared to actual facts.

For example, the actual number of murders known to have been committed in Metropolitan Toronto can be compared against the estimates of the number of murders committed by those who are exposed to a high level of media violence and those who are exposed to a low level of media violence. If media violence affects perceptions, then one would anticipate that the frequent consumer of media violence would be very likely to over-estimate the actual number of murders committed. Similarly, if the frequent viewer of television violence is asked to estimate the percentage of crimes which are crimes of violence, and is given a figure which is an over-estimate and another figure which is an under-estimate, we would expect such individuals to select most frequently the over-estimate.

#### CORRELATES VS. EFFECTS

A number of possible effects of media violence observed by other researchers have been discussed above. It should be noted that

it is not the intent of this study to demonstrate that these effects occur. Rather, primary interest is centered upon the degree to which these effects, as assessed by a survey research approach, may differ in magnitude for a mentally disordered group, and a comparison group of individuals without symptoms of disorder.

The differences which do emerge are not to be construed as necessarily being an effect of media violence alone. There are any number of reasons, for example, why an individual might act in a highly defensive manner. It may be the case that such an individual may, upon being exposed to a frequent diet of media violence, have developed exaggerated fears concerning the possibility of personally being attacked on the street or at home. On the other hand, the extreme defensiveness may simply rise from the fact that the individual actually has been attacked, or has known a close friend or relative who has been attacked. Or, people who are excessively shy or who do not have any friends, may not go out at night. They may justify such behaviour by believing that there is "too much of a chance" that they might become victims of an attack or robbery. Also, since they do not go out at night, and have nobody to talk to - they may watch an excessive amount of television to "feed their fears".

The point is that there are many alternative explanations as to why an individual may exhibit high levels of aggressiveness, anxiety, tolerance, defensiveness, or mis-perceptions. It is important to note therefore that the research project simply demonstrates what combinations of factors "go together". Researchers and readers alike are free to make interpretations as to the underlying reasons for the correlations observed between the variables studied.

Even as in the most carefully designed laboratory research, however, one can never completely eliminate the possibility that alternative hypotheses from those supported by the researcher may also explain the research findings. Of course, in a field in which so much previous research has been done, one's inferences can always gain extra explanatory power by virtue of the fact that they may be congruent with the findings of previous research studies.

#### MEASURING MENTAL DISORDER

The Diagnostic and Statistical Manual published by the American Psychiatric Association (1952) divides the "disorders of psychogenic origin or without clearly defined physical cause or structural change in the brain" into (1) psychotic disorders; (2) psychophysiologic autonomic and visceral disorders; (3) psychoneurotic disorders; (4) personality disorders that include sexual deviations, addictions, etc.; and (5) transient situational personality disorders, such as stress situations, adjustment/life, etc.<sup>15</sup>

As used in this project, "the inability to use one's physical and mental resources is one of the outstanding signs of mental disorder".<sup>16</sup> In this definition, put forward by Benjamin Wolman, mental disorder is usually manifested as a pattern of irrationality in cognitive processes, emotional disbalance, and social maladjustment. In survey studies such as that undertaken in the present project, the overwhelming majority of the mentally disordered individuals interviewed, would fall into the latter group.

At the other end of the scale, "mental health is a condition and level of social functioning which is socially acceptable and personally satisfying".<sup>17</sup>

For treatment purposes, psychiatrists and psychologists typically diagnose individuals in accordance with a series of categories defined under the major areas of classification as outlined in the above description of the publication by the American Psychiatric Association. However, researchers are typically more concerned with simply identifying the intensity, degree or seriousness of disorder observed. The basic question is simply one of, "does or does not this particular individual show sufficient signs of disorder to suggest that he or she should be receiving treatment?" Individuals are usually assessed as to whether they exhibit mild, severe, or incapacitating levels of mental disorder. All such individuals would be considered "cases" but only those in the incapacitating category would usually be considered so severely disturbed they would have to be hospitalized. The proportion of individuals in this population is always relatively small. Most individuals needing treatment are never hospitalized in a psychiatric facility, nor do they ever see mental health professionals.<sup>18</sup> In a study carried out in the United States, it was noted that approximately 1 out of every 7 individuals will, at some point in their lives, see a mental health professional. One in every 4 individuals will indicate that they have felt at one time or another that they should seek help for their psychological problems.<sup>19</sup>

In Mental Health in Ontario it is noted that psychosis - a level of disorder which generally requires hospitalization - is a

relatively uncommon condition representing considerably less than 16% of significantly disabling mental illnesses. The remaining 84% of such illnesses are generally referred to as "psychoneuroses".<sup>20</sup>

How does one identify a mentally disordered individual? In a clinical situation, an interviewer would carry out a systematic inquiry into the symptoms which the patient has reported having in the "last little while". Symptoms of mental disorder include the following:<sup>21</sup>

- somatic symptoms (e.g. headaches, constipation)
- fatigue
- sleep disturbance
- irritability
- lack of concentration
- depression
- anxiety
- phobias
- obsessions and compulsions
- sense of depersonalization

Of course, the number of symptoms, as well as the intensity and persistence of the symptoms are of considerable importance in helping the interviewer make a judgement. In addition, the interviewer would carefully observe the subject and attempt to identify behavioural cues or abnormalities which would suggest a state of mental disorder. The cues which one looks for include the following:<sup>22</sup>

- slow speech patterns and lacking in spontaneity
- suspicious, defensive
- historionic, prone to exaggeration

- depressed
- anxious, agitated, tense
- inappropriately elated, or euphoric
- flattened or incongruous expression of affect
- depressive thought content
- excessive concern with bodily functions.

Again, these cues are rated with respect to the frequency and intensity with which they appear during the interview.

The content of the interview itself will usually consist of questions concerning family, employment, social and illness histories, current status and recent events or changes in these areas.

To carry out such assessments obviously requires a fairly significant amount of time plus the services of a highly trained experienced interviewer.

For research purposes, it has obviously been necessary that a quick, inexpensive and reasonably accurate screening procedure be developed. Essentially, this means taking standard questions which should be asked in an interview and translating them into a questionnaire format which can then be self-administered or administered by an interviewer who is not a mental health professional. While no questionnaire will be as accurate as the person-to-person contact with a professional, researchers have found that as long as one is dealing with large numbers of subjects, the misclassification of a few healthy individuals into the mentally disordered category, and vice versa, does not significantly distort the research findings. There are a number of assessment techniques available to the researcher today. It is important to select



the length of test (longer tests are often more accurate) and the degree of structure involved (researchers using highly trained or professional interviewers generally use less structured assessment devices) which best fits the demands on one's research project.

In the present project, a questionnaire developed by Dr. D. P. Goldberg was used. This questionnaire has been researched in many different projects in England, The United States, and Canada. Documentation as to its accuracy and validity, relative to that of other existing tests, is readily available.<sup>23</sup>

This is a 30-item test. One of the items, and the standard response categories from which the respondent selects, appears below:

Have you recently lost much sleep over worry? (circle one)

- not at all
- no more than usual
- rather more than usual
- much more than usual.

A number of studies have been carried out to assess the reliability and validity of this questionnaire. To cite the results of one study, the test-retest reliability was 0.77 and the split-half reliability was 0.92. The validity coefficient was 0.80 using the ratings of a psychiatrist who had been trained in the use of a structured interview format. The overall mis-classification rate was 11%. 91.4% of those individuals identified in the interviews as mentally disordered were identified as such using the questionnaire. In other words, 8.6% of the "cases" were missed. With respect to the non-cases,

87% were correctly classified. That is, 13% of the "normals" were classified as mentally disordered.

These figures indicate that the Goldberg questionnaire is superior to other questionnaires which, in terms of length, would have been appropriate for this project. Of course, some questionnaires provide data which is comparable and in some cases somewhat better than the 30-item Goldberg. However, these are much too long to be useful in a field setting. These other questionnaires include a 60-item Goldberg, the Fouldes' 366-point Symptom-sign Inventory and Saslow's 447-point Screening Test.<sup>24</sup>

The details of questionnaire administration will be outlined in the following chapter of "the interview process".

## IV - THE INTERVIEW PROCESS

In this chapter, the techniques for selecting the individuals to be interviewed for the project, and the means by which the interview is actually conducted, will be discussed.

### SAMPLING ISSUES

No one has yet solved the problem of identifying a methodology which is beyond criticism for the selection - at a reasonable cost - of a random sample of mentally disordered adults who are not hospitalized. It is probably fair to say that standard sampling procedures which are likely to please research technicians, are likely to horrify clinicians who are aware of the number and type of mentally disordered individuals who are most likely to be missed in the usual sampling procedures. It is important to consider some of these types of individuals who have been sought out for interviews for this project.

First, there are those individuals who exhibit symptoms of mental disorder but are, nonetheless, able to function reasonably effectively in society. That is, they can maintain a stable home life and/or hold down an excellent job. These are the "easiest to reach" individuals. While their scores on a mental health questionnaire would indicate that they were mentally disordered, they may show few signs of significant maladjustment or unhappiness in their everyday life. Some researchers feel that the mere presence of symptoms of this order is not enough to even assess the mental health of an individual. The argument is that an individual can, at the same time, exhibit signs of superb adjustment in certain areas of life,

while exhibiting symptoms of disorder in other aspects of life. Total mental health is then considered to be a balance between an "individual's pluses and minuses" rather than just a simply reflection of the "minus" alone.<sup>1</sup>

For purposes of this project, there has been no attempt to enter into this additional complication of assessing mental disorder. Nevertheless, the thrust of the project is such that if a bias in sampling does occur, it should surely be in the direction of the "poorly adjusted" mentally disordered, rather than in the direction of the "better adjusted" mentally disordered.

Second, there are a large number of individuals who have been mentally disordered for a long period of time and while not seriously disturbed, have in the course of their disturbance been forced to adjust to a deteriorating life-style of transiency, unemployment and ill health.

It has been pointed out by other researchers that this is a very important group of individuals since they truly constitute the "fringe" of society.<sup>2</sup> Particularly from the standpoint of involvement in violence and attitude toward violence, it is important that this group not be missed for this particular project. Yet, these are precisely the individuals who often live by themselves, have no home, or never return home except to sleep for a few hours at night. This group, in fact, epitomizes the "hard to find" interviewee which represents that 20% of the population on which interviewers often spend 80% of their time.

Third, when an individual exhibits symptoms of anxiety or depression, irritability or confusion - or any or all combinations of these - he or she is very likely to ignore or reject pleas to participate in a research project. Also, it must be recognized that many individuals who are mentally disordered are simply too embarrassed to want to discuss such matters with strangers.<sup>3</sup>

If individuals such as these live with someone else, it is exceedingly difficult for an interviewer to make contact with the individual, let alone know if he or she is at home. To get cooperation from this group of individuals requires either a reference through a friend of theirs or a two-phase contact. A brief preliminary contact is needed to acquaint oneself and to break down suspicions, which is then followed at a later date by the actual interview itself.

### Sampling Bias

Of course, every population which one surveys will have a certain proportion of "hard to find" or "refused to cooperate" people. To the degree that such individuals are missing from one's sample, the data collected on that population is going to be marginally unrepresentative. In most surveys, non-participants usually represent a small proportion of any sample of individuals. There are statistical and methodological techniques to adjust for the error introduced by such cases.<sup>4</sup>

In the present project, it is felt that a major and not a minor proportion of the population would be likely to fall into the "hard to find" category. It is felt that special care had to be taken so that the bulk of the sample was not made up of the "well-adjusted" mentally disordered individuals. Such individuals could be expected



to appear on a Voters' List (one common way of drawing samples) or to live and be available in a randomly pre-selected living space (another common way of drawing samples).<sup>5</sup>

During a pre-test, a random selection of living units within a random selection of four census tracts within Toronto were identified. It became quickly apparent that it was economically unfeasible to even quickly screen an entire family in an attempt to identify the occasional individual who was mentally disordered and cooperative. Priorities were carefully assessed and it was decided that, for purposes of this project, if a bias were to be introjected into the sampling process, it should definitely not be in the direction of including the "amenable" mentally disordered person who was at home when the interviewer called, who answered doors, and who was cooperative. As a matter of judgement then, the sample selection procedures were specifically designed to ensure an adequate representation of those mentally disordered individuals who were transient, social misfits or otherwise on the fringes of society.

In fact, it is well known that a higher incidence of mental disorder is found among the lower socio-economic classes.<sup>6</sup> As could be expected then, any identification technique which is reasonably efficient in finding mentally disordered people to interview, will necessarily be heavily weighted in drawing individuals from the poorer sections of the community.

#### TWO-PHASE IDENTIFICATION

The interview process involved two phases - a screening phase, and an interview phase.

The purpose of the screening phase was to quickly identify individuals who might qualify for the project, and prepare them for a longer interview at a subsequent date.

### The Screening Process

The screening interview (Appendix B) takes only a few minutes to complete. It consists of a very short introduction followed by a question asking whether or not the interviewee has recently seen a disturbing, violent event in the media. If the interviewee does recall such an event, the interviewer then asks a few short "yes or no" questions concerning the interviewee's health. In the event that the interviewee reported at least two symptoms which could possibly be indicators of mental disorder, he or she was asked to participate in a longer interview session.

If, to start with, the interviewee did not recall having seen a disturbing, violent event in the media, then the interviewer expressed thanks for the time and proceeded immediately on to the next most convenient individual.

Since interviewers often worked in crowded streets and shopping centres, they would frequently speak with as many as 15 to 30 people an hour. During the course of the project, approximately 9,500 people were approached in this manner.

Of the number of individuals contacted, 657 qualified in the screening interview by reporting both that they had recalled a violent media event and in addition, gave evidence, on at least 2 questions, of possible mental disorder. Of this number 72% or 482

individuals, were interviewed. Those who were not interviewed included those who were persistently inebriated, confused, uncooperative or mentally retarded. Many individuals simply gave the interviewer a false address or telephone number so they could not be contacted at a later date. Of the 482 individuals collected, 7 proved to be useless due to interviewer error, so the actual number included in the analysis was 475.

### Screening Techniques

Three techniques of indentifying potential subjects were used. First, screening interviews were carried out in public places. Of those 475 individuals who eventually completed the longer interview, 50% had first been approached by the screening interviewer in a shopping centre or on a downtown parking lot. Twenty-five per cent were approached directly on one of the major downtown streets of Toronto.

A second technique was to carry out interviews on a door-to-door basis. This accounted for approximately 15% of the total number of respondents.

The third technique involved the use of referrals from other individuals. That is, for approximately 10% of the cases, interviews were carried out because the interviewer was specifically directed to an individual by someone who felt that, in terms of symptomology, the person in question would be "what the interviewer was looking for".

## The Pre-Testing Process

In the course of developing the screening interview, the objective was to reach a level of approximately 50% accuracy in predicting mental disorder. That is, of those individuals who qualified for the long interview, it was desired that no more than 50% of them should actually qualify as being mentally disordered when subjected to the 30-Item Goldberg Scale during the course of the long interview.

Also, as a necessary efficiency criterion to ensure that efforts would be balanced against resources, a screening location qualified only if the interviewers could make an appointment with one qualified respondent per hour.

The project manager did not set quotas for each interviewer but, rather, monitored information concerning contacts on the basis of age and sex in such a way that males and females were approached equally and that approximately 50% of the sample were between the ages of 18 and 35 and the other 50% were between the ages of 35 and 65.

## The Long Interview

The second phase of the interview process involved actually going to the individual's home to carry out the hour-long interview. The content of the interview covered demographic data, media preferences and use rates, a scale to measure mental disorder, and scales to measure the aforementioned effects of violence such as tolerance, anxiety,

aggressiveness, defensiveness, and misperceptions.

A number of the interviewers wished to participate anonymously in the process, so arrangements were made to either meet them at the researcher's downtown office or in a restaurant or library. These individuals constituted no more than perhaps 5% of the total interview population.

#### Methodological Controls

In the screening interview, it will be recalled that the intent was to be "correct" in identifying mental disorder only 50% of the time. One of the reasons for doing this was to ensure that when an interviewer carried out the long interview, he or she would not know whether the interviewee was actually in the mentally disordered group or the comparison group. Such "blind" interviewing is always a recommended technique to ensure minimal interviewer bias in the data.

The second reason for the "50/50" screening objective was to generate a realistic comparison group for the mentally disordered group. That is, just any group of individuals who are not mentally disordered would hardly serve as a comparison group - especially since the sampling procedures for the mentally disordered would be bound to include transients and other fringe members of society. By using precisely the same screening method for both the comparison group and the mentally disordered group, differences between the two groups - on dimensions other than mental disorder - was minimized.



## Interviewer Controls

Those individuals conducting screening interviews gave, each day, the names, addresses and telephone numbers of qualified respondents to the project manager. The project manager then distributed these names to interviewers who carried out the longer interviews in the home. Most of the screening interviewers who developed a reasonable level of competence and experience were eventually allowed to carry out the longer interviews. In all cases, a quality control check on 10% of all long interviews completed was carried out by the project manager and the research director.

## INTERVIEW ADMINISTRATION

The questionnaire was designed to be either self-administered or to be administered by the interviewer. In practice, interviewers administered the interview (i.e. each item and the choices were read to the respondent) up to the beginning of the last 30 questions, which constituted the Goldberg Questionnaire. The interviewer then told the respondent, "I have been reading all the questions to you so far, now you can fill out these last few for yourself, if you like." If the respondent had difficulty in reading, or was too disturbed or otherwise incapacitated, the interviewer administered the last 30 items also.

The questionnaire was occasionally self-administered, with the guidance of the interviewer. This occurred when the respondent appeared to be articulate, intelligent and involved. The interviewers found that reading the items and choices was a slow and irritating

experience for all parties concerned. In these cases, the respondent completed the questionnaire while in the presence of the interviewer.

### The Questionnaire

The questionnaire used in the long interview (see Appendix C) contains 138 questions. Many of the individual items are combined to form scales of concepts discussed in previous chapters - such as aggressive attitudes, or feelings of anxiety or defensiveness. The specific items which have been combined to form scales, and the statistical decisions involved in this process, are discussed in detail in the following chapters.

In keeping with the standards of professional practice and the laws of copyright, the last three pages of the questionnaire are not included here, since they contain the 30 Goldberg items to assess mental disorder.

### Ethical Considerations

To a certain extent, the ethical constraints under which this project operated precluded the collection of data from a number of potentially-interesting cases. At both the level of the screening interview and the long interview, interviewers were instructed to immediately terminate the interview if there was any indication of significant resistance, increasing confusion, or any other indications that the interviewee felt "pressured".

In projects dealing with the identification of the mentally disordered, interviewers will inevitably encounter cases which they feel

need immediate professional attention. In the few cases where this did occur, the research director personally contacted the individuals. With only two exceptions, these contacts were always made by telephone. Information concerning assistance available through social service agencies or other sources was volunteered as it seemed appropriate.

## V - DESCRIBING THE INTERVIEWEES

The purpose of this chapter is to present those findings from the research which describe the personal characteristics of the interviewees. Where there are differences between the characteristics of the mentally disordered group and the comparison group, these will be discussed.

In making comparisons between any combinations of numbers, the question always arises as to when differences in magnitude are worth discussing. For example, if in this study the scores on the Goldberg scale indicate that 45% of the female population, and 50% of the male population, are mentally disordered - is this difference in 5% a difference which is worth noting?

Is it fair to say, based upon the difference of 5%, that males show more evidence of mental disorder than females? Indeed, if the project were done again, (using the same sample selection procedure and the same questionnaire), should we expect that the same finding would appear in our new group of respondents?

The answer to such questions is determined by means of common statistical analyses. Such analyses would perform the function of analyzing the relative distribution of scores on a mental health scale for both males and females and would take these distributions into account, according to systematic rules of comparison, in making judgements concerning the meaningfulness or significance of the difference between the aforementioned percentage figures of 45% and 55%.

EXHIBIT 1

MENTAL DISORDER AND AGE

Age	Comparison group	Mental disorder
18 - 24 years	25.8%	40.5%
25 - 34 years	31.3	28.1
35 - 44 years	11.9	8.8
45 - 54 years	15.5	17.1
55 - 64 years	11.9	4.1
65 years and over	3.6	1.4
TOTAL	100.0%	100.0%



In carrying out these analyses, it is important to recognize that it is not just the size of the difference between the two percentage points which was taken into consideration, but the actual spread or distribution of every individual's score in each group to be compared. The interested reader will find that there are many introductory books in statistical analysis which will explain the process of such comparisons in technical detail.<sup>1</sup>

For purposes of this report, suffice it to say that the data discussed has been subjected to various forms of statistical analysis, whenever appropriate. When differences between figures are discussed, it should be understood that the differences warrant discussion because analyses have shown the differences to be statistically "significant". This is a conventional term which is always used in research of this nature.

When the difference between two figures is significant, this means that the observed difference is so large that one would expect it to occur purely by accident only 5 times, or less, out of 100. That is, one can be exceedingly confident that the difference is genuine - i.e., the difference observed in the small sample of respondents is the same difference which exists in the population from which they were drawn.

#### AGE

The percentage of individuals falling into each category for the total sample studied appears in Exhibit 1. Also, in Exhibit 1, note that there is a significant difference between the disordered and comparison groups with respect to the distribution of individuals in different age categories. In the disordered group, 68.6% are under the age of 35; in the comparison group 57.1% are under the age of 35.

According to other field studies are mental disorder, there is no systematic relationship between age and frequency of disorder. Some studies find the highest level of disorder in the older age groups, whereas others find just the reverse.<sup>2</sup>

Considering the overall age distribution, notice that a high proportion of the respondents are under the age of 25. During the course of interviewing, it was noted by all interviewers that younger people were more interested in the topic being studied and were also very open in discussing their symptoms with the interviewers.

### SEX

More females (59.8%) than males (40.2%) were interviewed. Although equal numbers of males and females were approached during the screening interviews, the interviewers reported that the females were generally more cooperative both in discussing their symptoms, their views on violence and their willingness to make an appointment to be interviewed at length.

The finding that women are less reticent to discuss problems than are men, has been noted by other researchers.<sup>3</sup> The higher incidence of women is not, of course, an indication that more women than men are mentally disordered. In fact, although women were much less reluctant to talk to the interviewers than men, the proportion of disordered females is not significantly greater than the proportion of disordered males in the total sample.

EXHIBIT 2

SEX AND MARITAL STATUS

Marital status	Female	Male
Married	47.7%	33.5%
Divorced/widowed	11.0	6.8
Separated	8.5	6.8
Single	32.8	52.9
TOTAL	100.0%	100.9%

EXHIBIT 3

EDUCATION

Grade school	9.4%
Some high school	24.0
High school	19.1
Some college	22.9
Post high school	4.7
Community college	3.8
University	8.1
Some post graduate	4.0
Post graduate	4.0
TOTAL	100.0%

## MARITAL STATUS

The data on marital status, presented in Exhibit 2, shows that there is a substantial proportion of single and divorced or separated individuals among the interviewees. This is not surprising since a significant proportion of the sample are young, one would naturally expect many of them to be unmarried.

Those individuals who indicated that they were single were asked if they went out on dates with members of the opposite sex. About 35% indicated that they were not interested in such activities and only went out on dates very seldom. About 30% dated different people, and about 34% dated the same person regularly. It is, presumably, only this latter group of "singles" who maintain anything approaching a stable relationship with a member of the opposite sex.

As Exhibit 2 also indicates, it is the females who are significantly more likely to be married than are the males.

## EDUCATION

As Exhibit 3 indicates, the sample includes a large proportion of individuals who represent the extremes of education. That is, over 30% of the population has not graduated from high school. This is particularly striking because of the high proportion of individuals in the sample who are under the age of 25. Usually one would only expect to find this high proportion of individuals not completing high school in a much older age group.



EXHIBIT 4

RACE

Asiatic	2.3%
Negro	4.4
Caucasian	90.3
East Indian	1.1
Mixed, or refused	1.9
TOTAL	100.0%

At the other end of the continuum, however, notice that approximately the same proportion of individuals have either had some college experience or graduated from college. This distribution is a function of two factors. First, low levels of education tend to be related to unemployment, which, in turn, is related to mental disorder. Since mentally disordered individuals are selectively being screened from the population, it is not surprising that a high proportion of individuals fall into this low education category. At the other extreme, interviewers found that those interviewees contacted, who had had some college education, were more likely than any other group to express an interest in the project and indicate a willingness to participate further.

#### RACE

Exhibit 4 indicates that, with respect to race, there is a preponderance of caucasian respondents. This distribution definitely does not represent the relative proportion of mental disorder in the various racial groups located in Toronto. Rather, it reflects the fact that the Goldberg Questionnaire has been developed and validated on a English speaking population.<sup>4</sup>

The questionnaire contains a number of colloquial concepts (e.g. "Have you recently found everything getting on top of you?") which are open to questionable interpretations by individuals from other cultural backgrounds. It should also be noted here that, while data was not collected on such dimensions as dominant language, or country of birth, there is clearly and intentionally an under-representation of the various large ethnic groups in Toronto, (e.g. Portugese, Greeks, Italians).

EXHIBIT 5

HOUSING

Detached house	31.4%
Duplex	15.0
Apartment	41.7
Rooming house	8.5
Other	3.4
TOTAL	100.0%

The reasons for avoiding anyone in these groups who could not speak and understand English fluently is, once again, because of the questionable interpretation one would have to make of the scores on the Goldberg Questionnaire.

### HOUSING

The question on housing was particularly included to ensure that we have identified a proportion of the population who might be considered as transients. Various response categories also are meant to express a continuum representing high-quality to low-quality housing.

As Exhibit 5 indicates, this population is reasonably stable, with only 12% living in either a rooming house or "no particular place at all".

### INCOME

There is little to note on income other than emphasizing that the average level of income is low, relative to other available statistics on the income of Toronto residents.<sup>5</sup> On Exhibit 6, note that over 60% of the total sample earns \$8,000 or less.

### Income and Disorder

As Exhibit 6 also indicates, there is a significant relationship between mental disorder and personal income. Those with

EXHIBIT 6

MENTAL DISORDER AND LEVEL OF INCOME

Amount earned during the past year	Comparison group	Mental disorder
Up to \$4,000	35.8%	49.8%
\$4,001 - \$8,000	26.7	22.9
\$8,001 - \$14,000	22.9	18.0
\$14,000 and over	14.6	9.3
TOTAL	100.0%	100.0%

higher incomes are less likely to indicate symptoms of disorder. In the comparison group, 37.5% of that population earn over \$8,000, compared to only 27.3% of those who are in the disordered group.

This finding is congruent with the outcomes of other researchers.<sup>6</sup> Mental disorder implies, after all, a form of mal-adjustment which would probably make it difficult to attain the higher levels of income within one's occupational level, and may also make it difficult to find and hold a job.

#### EMPLOYMENT STATUS

Almost 40% of the sample, as Exhibit 7 shows, were employed at the time the study was conducted. The unemployment rate, among those looking for full-time work, was approximately 10%.

For all practical purposes, it is reasonable to consider those individuals who are unemployed and looking for part-time work, or employed only part-time, as not being seriously committed to the labour force.

Of those who are not working and are not looking for full-time work, many are homemakers (Exhibit 8). This is to be expected since over half of the population consists of women and about one third of the population are at student age - less than 25 years old. Eleven per cent of the interviewees reported being ill or disabled. While this figure is high, it is to be expected, since half of the sample were selected for the study precisely because they exhibited symptoms of mental disorder.



EXHIBIT 7

EMPLOYMENT STATUS  
AT THE TIME OF THE INTERVIEW

Employed full-time	39.6%
Employed part-time	17.2
Unemployed, looking for full-time work	10.4
Unemployed, looking for part-time work	5.0
Not working and not looking for work	27.8
TOTAL	100.0%

EXHIBIT 8

SEX AND EMPLOYMENT STATUS

Employment status at the time of the interview	Female	Male
Currently employed	31.5%	51.3%
Unemployed, seeking work	11.0	9.6
Unemployed, not seeking work	57.5	39.1
TOTAL	100.0%	100.0%

EXHIBIT 9

MENTAL DISORDER AND EMPLOYMENT STATUS

Employment status at the time of the interview	Comparison group	Mental disorder
Currently employed	44.2%	34.0%
Unemployed, seeking work	6.8	14.8
Unemployed, not seeking work	49.0	51.2
TOTAL	100.0%	100.0%

EXHIBIT 10

MENTAL DISORDER AND PERIOD OF UNEMPLOYMENT

During the past year,  
how long have you been  
unemployed and seeking  
work?

Comparison group

Mental disorder

Less than 1 week	52.6%	34.1%
1 - 3 weeks	14.4	16.5
4 - 8 weeks	14.4	13.2
9 - 25 weeks	12.4	20.8
Over 25 weeks	6.2	15.4
TOTAL	100.0%	100.0%

## Employment and Mental Disorder

Significantly more of the comparison group, according to Exhibit 9, than the disordered group were employed at the time the interview took place. It is interesting to note that approximately the same percentage of individuals in both groups were unemployed and not seeking work. Note that in the disordered group, there were twice as many individuals as were in the comparison group, who were unemployed and seeking work.

## Unemployment History And Disorder

Exhibit 10 indicates that the comparison group and disordered group also differ significantly with respect to the number of weeks during the past 12 months which they have been out of work. Note that this question was asked only of those individuals who were, at the time of the interview, either employed, or actively seeking work. In other words, all of these individuals were an active part of the labour force.

The majority of the comparison group respondents were out of work for less than one week during the past 12 months, while only 34.1% of the disordered group fell into this category.

In contrast, 18.6% of the comparison group, but 35.2% of the disordered group, were out of work during the past 12 months for a period of 9 weeks or longer. The differences emphasize, once again, the social maladjustment which is an implied characteristic of those individuals exhibiting symptoms of mental disorder.<sup>7</sup>

EXHIBIT 11

OCCUPATION AT THE TIME OF THE INTERVIEW

Professional/Technical	22.9%
Managers	7.9
Secretarial (senior)	7.1
Secretarial (clerical)	15.4
Sales	12.0
Craftsmen	6.4
Operatives	5.6
Service Workers	11.3
Labourers	8.6
Household workers	2.6
TOTAL	100.0%



## OCCUPATION

In examining the occupations of this sample, as displayed in Exhibit 11, the high proportion of professionals and technicians is readily noted. Recall that a significant proportion of this group has a relatively high level of education which is expected to be reflected in socio-economic status of occupations.

The other major groupings include secretarial, sales, service workers and labourers. For the most part, these positions can be attained without benefit of a high school diploma - which over 30% of this sample does not have.

Those individuals who were not employed at the time of the survey were asked what their last occupation had been. Three categories stand out. Of those currently unemployed, 22% had last worked as labourers. Ex-secretaries accounted for 14% and those who had been professionals or technicians accounted for 15%.

There were no significant differences between the disordered group and the comparison group with respect to their occupations.

## HEALTH

All respondents were asked if, during the last year or so, they had consulted someone about their physical health, mental health, or family problems.

With respect to the question concerning physical health, 121 or 25.5% of the 475 respondents reported that they had neither

EXHIBIT 12

MENTAL DISORDER AND  
SEEKING MENTAL HEALTH ASSISTANCE

Sought help in past year from mental health professional	Comparison group	Mental disorder
Yes, I should have	5.6%	14.2%
Yes, I actually did	7.9	20.1
No	86.5	65.7
TOTAL	100.0%	100.0%

consulted a professional concerning their physical health during the past year, nor did they feel they should have done so.

66.9% of respondents indicated that they actually had seen a doctor about their physical health during the past year, and 7.6% reported that while they did not actually see a doctor, they should have done so.

There were no significant differences between the mentally disordered group and the comparison group in response to this question concerning physical health.

### Mental Health

Respondents were also asked if, during the last year, for reasons of mental health, they had seen a psychiatrist or psychologist. Exhibit 12 indicates that, as expected, a significantly greater proportion of those in the mentally disordered group than in the comparison group reported that they had either seen a mental health professional, or felt that they should have. Note that, nevertheless, fully 65.8% of the mentally disordered population reported that they neither saw a psychologist or psychiatrist during the past year, nor did they feel that they should have.

These data simply support what many other researchers have found. That is, people are embarrassed to admit that they have mental health problems. Furthermore, by far the greatest majority of individuals with mental health problems, never seek assistance from a mental health professional.<sup>8</sup>

EXHIBIT 13

SEVERITY OF MENTAL DISORDER

No disorder (1 or fewer symptoms)	31.8%
Clinically insignificant disorder (2-4 symptoms)	21.9
Moderate disorder (5-12 symptoms)	30.1
Severe disorder (13 or more symptoms)	16.2
TOTAL	100.0%

For the purposes of this project, respondents are considered either "mentally disordered" or "not mentally disordered" (comparison group). Within the mentally disordered group, there are obviously varying levels of severity of disorder. Researchers have noted that the Goldberg Questionnaire, which was used for this project to identify mentally disordered respondents, can also be used to give some measure of severity of disorder.<sup>9</sup> That is to say, the more symptoms the respondent indicates that he or she has, the more severe the level of disorder is usually judged to be by a clinical psychiatrist or psychologist.

The range of scores on the Goldberg scale is 0 to 30. Considerable research has demonstrated that scores of 4 or less on this questionnaire indicate that the respondent does not exhibit any significant symptoms of mental disorder.<sup>10</sup> A score of 5 or more places the individual in the mentally disordered category. This distinction - in medical terms, discriminating the "cases" from the "non-cases" - is useful in simply indicating who does or does not need treatment. There is less agreement among clinicians as to what precise score on the Goldberg Questionnaire which discriminates the severely disordered from the moderately or mildly disordered. The data produced by previous researchers, however, suggests that, as a rough guideline, scores of 13 and above constitute severe levels of disorder.

At the other end of the scale, it is possible to examine the comparison group in terms of those who have almost total absence of any symptoms whatever and those who exhibit a few symptoms, but obviously not enough to constitute a significant state of mental disorder.

Exhibit 13 indicates the number of individuals at either extreme. Of those in the comparison group - with scores of 4 or less -

EXHIBIT 14

MENTAL DISORDER AND SEEKING  
ASSISTANCE FOR FAMILY PROBLEMS

Sought help in past year for family problems	Comparison group	Mental disorder
Yes, I should have	4.8%	8.2%
Yes, I actually did	9.1	15.5
No	86.1	76.3
TOTAL	100.0%	100.0%



over one half of this group have either no symptoms or only one symptom. Among those in the disordered group - scores of 5 or above - about one third of these individuals could be considered to be severely disordered.

### Family Problems

All respondents were asked if, during the past year, they had seen someone - such as a social worker or a minister - about the problems they were having with their family. The mentally disordered individuals often have difficulties in family adjustment.<sup>11</sup> As Exhibit 14 indicates, the mentally disordered group did, in fact, report seeking assistance for family problems significantly more frequently than did those in the comparison group.

## VI - MEDIA USE

All respondents were asked questions concerning how much time, or how frequently, they exposed themselves to television, movies (at motion picture theatres), newspapers, magazines, and radio. They were also asked the types of presentations or programs they most preferred, or most frequently attended, in these media.

The purpose of this aspect of the project was to investigate differences between the mentally disordered group and the comparison group with respect to their media consumption patterns.

### TELEVISION

The respondents were asked to indicate how many hours a day they watched T.V. and to identify the shows which they watched regularly during the past 6 months.

As Exhibit 15 indicates, almost everyone watches some television every day. Approximately 70% of the respondents watched television between 1 and 4 hours per day. Almost 15% watched television for 4 hours a day or more.

The amount of television watched, relates significantly to the respondent's level of education. Heavy viewers of television - those who watch for 4 hours a day or more - are, as Exhibit 16 indicates, likely to be those who have not graduated from high school.

EXHIBIT 15

HOURS OF TELEVISION WATCHED PER DAY

Never	13.0%
1 - 2 hours	50.7
3 - 4 hours	21.7
4 - 5 hours	7.6
6 or more hours	7.0
TOTAL	100.0%

EXHIBIT 16

TELEVISION VIEWING AND EDUCATIONAL LEVEL

Educational level	Never watch television	1-2 hours per day	3-4 hours per day	4-5 hours per day	6 or more hours per day
Some high school	20.0%	24.9%	45.1%	50.0%	63.6%
Completed high school	21.7	23.2	29.4	22.2	18.2
Some college	33.3	32.1	14.7	25.0	15.2
Completed college or university	25.0	19.8	10.8	2.8	3.0
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%

### Types of Viewers

In what ways are heavy viewers - those who watch television for 4 hours a day or more - different from light viewers - those who watch 2 hours a day or less? Or, to phrase the question in a slightly different way - what personal information about someone would prove useful in attempting to predict whether or not that individual was a heavy or light viewer of television? And, if you did know what type of information would be useful in making such prediction, how would you know how much weight or importance to give one piece of information as against another piece of information?

The statistical technique which is known as "discriminant analysis" is used to answer such questions as those stated above. In the present case, the following information was entered into an analysis in order to determine what combinations of information would prove to be useful in discriminating between high and low viewers.

- education level
- age
- income
- quality of housing
- sex
- employment status
- marital status
- mental disorder.

The procedure essentially involves the application of step-wise linear regression analyses. These statistically assess each of the above-mentioned predictor variables with respect to its relevance or usefulness in discrimination between two groups.

EXHIBIT 17

DISCRIMINANT ANALYSIS: TELEVISION VIEWING

Variables entered into the analysis	Standard discriminant function coefficients*
Education	-0.62
Age	
Income	
Housing	0.33
Sex	
Employment status	0.23
Marital status	-0.34
Mental disorder	0.40

\*The larger the coefficient, the more important the variable in the prediction equation.



The particular strength of this form of analysis lies in the fact that the relationship between a predictor variable (e.g., level of education) and a criterion variable (e.g., being a heavy or a light viewer) can be assessed while holding constant, or partialling out, the impact of other related, predictor variables. That is, among a group of individuals of varying ages, it might be found that the younger individuals are more likely than the older ones to be heavy viewers. Now, if we wanted to assess the relationship between the level of mental disorder exhibited by individuals in this group and their viewing habits, it would be important to know to just what extent the observed relationship between disorder and viewing was due to the relationship of age and viewing. After all, what if more young people than old people happen to be in the mentally disordered group? The strength of the relationship between mental disorder and viewing habits, in this group, could not be known until the extent to which the influence of age on the relationship was assessed and "subtracted from" the observed relationship between mental disorder and viewing patterns.

### The Predictors

, Exhibit 17 contains the following essential information:

- the variables entered into the analysis
- the combination of variables which prove useful, in a statistically significant fashion, in discriminating between high and low television viewers
- the relative weights of the predictor variables.

EXHIBIT 18

TYPE OF TELEVISION SHOWS MENTIONED

Comedy (Mary Tyler Moore, Bob Newhart)	22.0%
Crime (Kojak, Starsky & Hutch)	18.6
News	10.3
Soaps (The Edge of Night, Mary Hartman)	10.2
Movies/Entertainment Specials	8.2
Historical/Drama (The Waltons, Masterpiece Theatre)	7.6
Sports	5.8
Educational, Information Specials (Wild Kingdom, The Ascent of Man)	5.6
Talk Shows (Front Page Challenge, Johnny Carson)	4.0
Musical/Variety (Sonny & Cher, Bobby Vinton)	4.0
Game Shows	3.6
Continuous Dramas (Saga, Upstairs Downstairs, Rich Man, Poor Man)	.1
TOTAL	100.0%

The relative weights associated with each variable indicate that, for this combination of variables, the larger the weight the more important - or more "useful" - the variable is, in comparison to the other variables, in predicting whether or not an individual is a heavy or light television viewer.

Basically, those who watch television for 4 hours a day or more are likely to differ from those who watch television for 2 hours a day or less by being:

- poorly, rather than well educated
- living in apartment houses or rooming houses, rather than detached houses or duplexes;
- being unemployed rather than employed
- being single or separated rather than married
- being in the mentally disordered, rather than the comparison, group.

#### Shows Viewed

All respondents were asked the names of the shows which they had viewed regularly during the past 6 months on television. No lists of suggested shows were shown to the respondent, nor did the interviewer suggest either categories or names of popular shows.

Types of shows which respondents reported viewing regularly were coded into the 12 categories as outlined in Exhibit 18. Primary interest lie only in what types of shows an individual watched. Thus, if someone named three talk shows, then it would simply be noted that the individual watched one or more talk shows. In categories other than crime shows, comedy shows, soap operas, respondents seldom mentioned more than one type of the same category of show they watched.

EXHIBIT 19

MENTAL DISORDERS AND SOAP OPERAS

Number of soap operas watched	Comparison group	Mental disorder
Low	83.5%	75.0%
Medium	9.8	17.3
High	6.7	7.7
TOTAL	100.0%	100.0%

## EXHIBIT 20

**HOURS OF TELEVISION VIEWING  
AND CRIME SHOWS MENTIONED**

[illegible]

EXHIBIT 22

FREQUENCY OF MOVIE THEATRE ATTENDANCE

Never	18.3%
1 - 5 per year	43.7
6 - 12 per year	20.8
2 - 5 per month	13.6
6 per month or more	3.6
TOTAL	100.0%



EXHIBIT 23

FREQUENCY OF TELEVISION VIEWING  
AND MOVIE THEATRE ATTENDANCE

Hours of TV viewing per day	Never attend movies	1-5 movies per year	6-12 movies per year	2-5 movies per month	6 or more movies per month
Never	7.0%	12.3%	13.4%	17.5%	29.4%
1 - 2 hours	44.2	47.5	63.9	52.4	52.9
3 - 4 hours	20.9	26.5	14.4	19.0	5.9
4 - 5 hours	12.8	6.9	6.2	6.3	5.9
6 hours or more	15.1	6.9	2.1	4.8	5.9
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%

At the same time though, it should be recognized that comedy shows are an equally dominant force on television. Exhibit 21 indicates that the number of comedy shows watched is also significantly related to the amount of television watched.

## MOVIES

Respondents were asked how often they went to movie theatres and what sort of movies they liked to see the most.

The great majority of the population, as Exhibit 22 indicates, go to only five movies or less per year.

## Television Versus Movie Attendance

There is a statistically significant relationship between the frequency with which one attends the movie theatres and the number of hours of television watched per day. As Exhibit 23 indicates, the more movies one attends, the less television watched. At the extremes, 80% of those who attend 6 or more movies per month, watch television for only 2 hours per day or less. By the same token, 80% of those who watch television for 6 hours per day or more, attend 5 or fewer movies per year.

## Type of Theatre Patrons

A discriminant analysis was carried out on those individuals who attended movie theatres frequently - 2 times or more per month - and those who attended infrequently - 5 times per year or less. As in the case with the analysis carried out on the television viewers,

EXHIBIT 24

DISCRIMINANT ANALYSIS:  
FREQUENCY OF MOVIE ATTENDANCE

Variables entered into the analysis	Standard discriminant function coefficients*
Education	
Age	0.62
Income	
Housing	-0.25
Sex	-0.25
Employment status	-0.20
Marital status	-0.41
Mental disorder	

\*The larger the coefficient, the more important the variable in the prediction equation.

the purpose of this approach is to identify the pattern of characteristics which discriminates between frequent and infrequent users of the movie medium.

In Exhibit 24, the variables which were entered into the discriminant analysis are displayed. The variables which proved useful in discriminating between frequent and infrequent attenders of movie theatres, and the relative importance of these individual variables, as indicated by the magnitude of the weight assigned to each variable, is also presented in Exhibit 24.

Those who attend the movie theatres frequently differ from those who attend infrequently in:

- being younger rather than older
- more likely to live in an apartment house or a rooming house than in a detached house or duplex
- more likely to be male rather than female
- more likely to be employed rather than unemployed
- and more likely to be single or separated rather than married.

Note that, in this analysis, mental disorder did not prove to be a useful predictor of movie theatre attendance.

### Movie Preferences

Respondents were asked what sort of movie they preferred. Interviewers noted that there was often a considerable discrepancy

EXHIBIT 25

TYPE OF MOVIE MENTIONED

Comedy	29.6%
Musical/Disney	11.3
Biographies/Documentaries	7.7
Romance/Drama	23.2
Violence	23.2
Other/Foreign	5.0
TOTAL	100.0%

21.3% of the respondents did not prefer a particular type of movie

EXHIBIT 26

TYPE OF VIOLENT THEME IN MOVIES CITED

Crime (The Godfather)	18.5%
Adventure (westerns)	18.8
Historical (Barry Lyndon, Battle of Midway)	8.1
Humorous (Murder by Death, The Sting)	14.4
Fantasy/Horror (The Exorcist, Frenzy)	17.0
Vigilante (Straw Dogs, Billy Jack)	3.3
Disaster/Nature (Earthquake, Jaws)	7.4
Other (psychological issues, or mixed)	12.5
TOTAL	100.0%

79.8% of the respondents did not state a preference



between the actual content or a theme of a movie cited and the manner in which the respondent viewed it.

For example, one might hear "I like light entertainment or comedy, you know - something like one of those Clint Eastwood Westerns". Since a dominant theme in most of the Clint Eastwood Westerns is violence, it left some question as to whether or not the respondent really preferred violence or preferred - as was stated - comedy.

After the study had been underway for some time, the interviewers were requested to have the respondent state not only the type of movies they enjoyed, but to actually name one or two movies they had liked.

The types of movies which individuals indicated they preferred were grouped into the categories which appear in Exhibit 25. As Exhibit 24 indicates, approximately 37% of the population indicated that they preferred comedy, or light entertainment types of movies.

In those instances in which an individual cited not only the type of movie he or she preferred, but actually gave the name of one or two movies, those movies were analyzed in accordance with the type of violence - if any - they contained. For example, violence was considered to be a major theme in the movie The Godfather. The actual type of violence involved was categorized as being "crime violence". Violence was also considered to be a major theme in the movie The Exorcist. The type of violence involved here, however, was categorized as "fantasy violence". Exhibit 26 indicates the various types of violence which were represented in the movies cited by the respondents.

EXHIBIT 27

FREQUENCY OF NEWSPAPER READING

Never	4.9%
1 - 3 per month	9.5
1 - 2 per week	18.4
3 - 5 per week	19.1
6 or more per week	48.1
TOTAL	100.0%

EXHIBIT 28

PREFERRED SECTION(S) OF THE NEWSPAPER

Family/Women/Health	23.1%
Comics/Horoscope/Crossword	8.8
Entertainment/Culture	15.3
Advertisements	5.0
Sports	11.1
Travel	1.7
Business/Financial	3.1
News/Editorials	31.9
TOTAL	100.0%

22.5% of the respondents did not prefer a particular section of the newspaper

EXHIBIT 29

NAME OF NEWSPAPER(S) READ

The Toronto Star	48.4%
The Toronto Sun	22.0
The Globe and Mail	15.0
The New York Times	8.1
Other Canadian	3.8
Other Non-Canadian	2.7
TOTAL	100.0%

14.5% of the respondents did not name newspapers

Crime and adventure types of violence were the most frequently mentioned.

There were no relationships with respect to either types of movies preferred or with respect to the type of violent theme in movies named, with mental disorder.

### NEWSPAPERS

Almost one half of the respondents interviewed, as indicated in Exhibit 27, reported reading a newspaper regularly - that is 6 times a week or more.

Every respondent was also asked to identify any particular section of the paper they preferred. As Exhibit 28 indicates, almost 20% of the respondents who read newspapers had no section or sections they preferred in particular. Among those who did indicate preferences, the news sections were the most popular, followed by the family/women sections.

Respondents were also asked the name of the newspaper they usually read. This information is summarized in Exhibit 29. It must be emphasized that these data are in no way representative of the actual readership - on a city or province-wide basis - of the newspapers cited. Among the individuals interviewed, however, it is clear that the Toronto Star - which has every appearance of being aimed at the "average" man - is the most frequently identified newspaper.

The second most popular newspaper is the Toronto Sun. This is a light, easy-to-read newspaper which leans toward the use of

EXHIBIT 30

NUMBER OF DIFFERENT NEWSPAPERS READ

None	6.1%
1 newspaper	59.4
2 newspapers	27.4
3 newspapers	5.9
4 or more newspapers	1.2
TOTAL	100.0%



EXHIBIT 31

DISCRIMINANT ANALYSIS: NEWSPAPER READING

Variables entered into the analysis	Standard discriminant function coefficients*
Education	
Age	0.91
Income	
Housing	
Sex	
Employment status	0.49
Marital status	
Mental disorder	-0.26

\*The larger the coefficient, the more important the variable in the prediction equation.

sensational headlines and orientation toward youth. The third most popular newspaper is The Globe and Mail. This is a newspaper which is oriented toward the businessman and financier. Given the low average income of the respondents, it is perhaps not surprising that the readership of this newspaper is not larger.

There were many individuals who - when asked which paper they usually read - named more than one. In fact the average number of newspapers named was 1.38 (S.D. = 0.78). The distribution of responses is presented in Exhibit 30.

#### Types of Readers

A discriminant analysis was carried out on those individuals who were frequent readers of newspapers - 3 or more per week - and those who were infrequent readers of newspapers - 3 or less per month. This analysis identifies the pattern of characteristics which discriminates between frequent and infrequent readers of newspapers.

The Technical Appendix contains details of this analysis. However, in Exhibit 31, the variables which were entered into the discriminant analysis are displayed. The variables which proved useful in discriminating between frequent and infrequent readers of newspapers, and the relative importance of these individual variables as indicated by the magnitude of the weight assigned to each variable, is also presented in Exhibit 31. Those who read newspapers frequently differ from those who read newspapers infrequently in:

- being older rather than younger
- being employed rather than unemployed

EXHIBIT 32

FREQUENCY OF MAGAZINE READING

Never read magazines	17.1%
1 magazine per month	27.5
2 - 3 magazines per month	25.7
4 - 5 magazines per month	15.6
6 or more magazines per month	14.1
TOTAL	100.0%

EXHIBIT 33

TYPES OF MAGAZINES MENTIONED

Home/Fashion (McCall's, Cosmopolitan)	22.9%
Special topic (Modern Photography, Road & Track)	15.9
Business (Time, Fortune)	22.9
Romance/Sex (Playboy, True Romance)	8.4
Popular Fiction (Redbook, Readers Digest)	17.9
Intellectual/Educational (Scientific American, Canadian Forum)	10.4
Other (non-English, non-French)	1.6
TOTAL	100.0%

19.4% of the respondents did not name magazines

EXHIBIT 34

NUMBER OF "USUALLY READ" MAGAZINES MENTIONED

Named no magazines	19.6%
1 magazine	18.5
2 magazines	22.1
3 magazines	18.1
4 magazines	10.5
5 magazines or more	11.2
TOTAL	100.0%

- being in the comparison group rather than in the mentally disordered group.

Note that frequent use of the newspaper medium is predicted, in part, by knowing that an individual is in the comparison group, while frequent use of the television medium is predicted by knowing that the individual is in the mentally disordered group. That is, in one case the heavy use of one medium is associated with mental disorder, while the heavy use of another medium is associated with the absence of mental disorder.

#### MAGAZINES

The data with respect to the frequency with which magazines are read is presented in Exhibit 32. The respondents were also asked to name the magazines which they usually read. The magazines read by the respondents were categorized in accordance with the list which appears in Exhibit 33. The 3 types of magazines most frequently cited were news magazines (e.g. Time, Fortune), home/fashion magazines (e.g. Cosmopolitan, Good Housekeeping) and popular fiction (e.g. Readers' Digest, Red Book).

The number of magazines mentioned by respondents were also counted. The mean average number of magazines mentioned was 2.25 (S.D. = 1.84). The distribution of the number of magazines mentioned by the respondents is presented in Exhibit 34.

EXHIBIT 35

FREQUENCY OF TELEVISION  
VIEWING AND MAGAZINE READING

Hours of TV viewing per day	Never read magazines	1 magazine per month	2-3 magazines per month	4-5 magazines per month	6 or more magazines per month
Never	11.4%	8.6%	15.0%	15.3%	16.7%
1 - 2 hours	35.4	57.0	57.5	45.8	51.5
3 - 4 hours	27.8	19.5	20.8	27.7	12.1
4 - 5 hours	8.9	8.6	5.8	5.6	9.1
6 hours or more	16.5	6.3	0.9	5.6	10.6
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%



EXHIBIT 36

FREQUENCY OF MOVIE THEATRE  
ATTENDANCE AND MAGAZINE READING

Frequency of attendance at movie theatres	Never read magazines	1 magazine per month	2-3 magazines per month	4-5 magazines per month	6 or more magazines per month
Never been	44.3%	14.0%	14.2%	9.7%	13.6%
1 - 5 per year	35.4	51.0	43.3	41.7	39.4
6 - 12 per year	6.3	23.3	21.7	29.2	24.2
2 - 5 per month	12.7	10.1	16.7	15.3	13.6
6 per month or more	1.3	1.6	4.1	4.1	9.2
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%

EXHIBIT 37

DISCRIMINANT ANALYSIS: MAGAZINE READING

Variables entered into the analysis	Standard discriminant function coefficients*
Education	-0.64
Age	0.45
Income	
Housing	
Sex	-0.20
Employment status	
Marital status	
Mental disorder	0.52

\*The larger the coefficient, the more important the variable in the prediction equation.

Those who read magazines frequently differ from those who read them infrequently in:

- having more rather than less education
- being younger rather than older
- being male rather than female
- being in the comparison group rather than in the mentally disordered group.

Note that for both print media - newspapers and magazines - mental disorder is associated with infrequent use of these media, whereas this relationship is reversed with respect to predicting whether or not an individual is a frequent or infrequent user of the television medium.

## RADIO

As Exhibit 38 indicates, most people listen to the radio 1 to 2 hours a day. Note that the highest use category of 5 hours a day or more was recorded for 20.3% of the respondents. This may appear to be a very high level of media use. However, other researchers have noted that the radio is used in a somewhat different fashion from most other media.<sup>3</sup> That is, for many people, the radio simply provides a background to their other activities. It is not, in effect, a media which is likely to draw the concentrated attention which is characteristic of movies, television or newspapers.

## Program Preferences

The respondents were asked to indicate the types of programs which they listened most often. Those who cited only 1 type of program,

EXHIBIT 39

RADIO PROGRAMS MENTIONED

Rock music	23.1%
Middle of the road/Country music	20.4
Classical/Jazz	7.9
News programs	9.9
Talk shows	1.3
Music plus news	17.8
Music plus sports	2.9
Other shows	4.7
Three or more mentioned	12.0
TOTAL	100.0%

EXHIBIT 40

DISCRIMINANT ANALYSIS: RADIO LISTENING

Variables entered into the analysis	Standard discriminant function coefficients*
Education	0.77
Age	
Income	
Housing	
Sex	
Employment status	
Marital status	-0.69
Mental disorder	

\*The larger the coefficient, the more important the variable in the prediction equation.

mentioned rock music with about the same frequency as middle-of-the-road or country music, as shown in Exhibit 39. The rest of the respondents indicated some combination of programs listened to - the most frequent being some combination of music and news.

### Types of Listeners

A discriminant analysis was carried out on those individuals who were heavy users of the radio medium - 3 hours a day or more - and those who listened to the radio infrequently - 1 hour or less per day.

In Exhibit 40, the variables which were entered entered into the discriminant analysis are displayed. The variables which proved useful in discriminating between frequent and infrequent radio listeners, and the relative importance of these individual variables, are also presented in Exhibit 40.

Those who are heavy users of the radio medium differ from those who are infrequent users in:

- being poorly rather than well-educated
- being single or separated rather than married.

### OVERVIEW

The most important finding in the preceding pages is that respondents in the mentally disordered group are significantly more likely to be found among heavy television viewers than among light

television viewers. This relationship is reversed however for the heaviest users of the newspaper and magazine media.

The variable of mental disorder does not prove to be a significant predictor in discriminating between either frequent and infrequent movie attenders or frequent and infrequent radio listeners.

### Television

Among the population surveyed, 70% reported watching television for between 1 and 4 hours per day. Preferred shows included crime shows and comedy shows.

Predictors of heavy television viewing, in order of relative importance, are as follows:

- poorly, rather than well educated
- living in apartment houses or rooming houses, rather than detached houses or duplexes
- being unemployed rather than employed
- being single or separated rather than married
- being in the mentally disordered, rather than the comparison, group.

### Movies

A majority of the respondents surveyed reported going to the movie theatre 5 times a year or less. Favourite movies included comedies and those with violence.



Those who attend movie theatres frequently differ from those who attend infrequently in:

- being younger rather than older
- being more likely to live in an apartment house or rooming house, than in a detached house or a duplex
- more likely to be male rather than female
- more likely to be employed rather unemployed
- more likely to be single or separated rather than married.

### Newspapers

A majority of the respondents surveyed read a newspaper 7 times a week or more. Favourite sections included the news section and the family/women's sections.

Those who read newspapers frequently differ from those who read newspapers infrequently in:

- being older rather than younger
- being employed rather than unemployed
- being in the comparison group rather than in the mentally disordered group.

### Magazines

The average respondent surveyed reports reading over 2 magazines per month. Favourite magazines included news magazines and home/fashion magazines.

Those who read magazines frequently differ from those who read them infrequently in:

- having more rather than less education
- being younger rather than older
- being male rather than female
- being in the comparison group rather than in the mentally disordered group.

### Radio

Over 50% of the respondents surveyed reported listening to the radio between 1 and 2 hours per day. Rock music and middle-of-the-road or country music are the most popular programs.

Those who are heavy users of the radio medium differ from those who are infrequent users in:

- being poorly rather than well educated
- being single or separated rather than married.

## VII - AGGRESSION AND ASSAULT

Do people actually act more violently, or develop attitudes conducive to violence, as a consequence of being exposed to depictions of violence in the media? The fact that the controversy concerning the answer to that question has not yet been resolved after several decades of research illustrates both the importance of the question and the complexity of the issues involved.

There is no question that, under some circumstances, exposure to violent films can induce individuals to act in a more aggressive manner than they normally would.<sup>1</sup> Controversy rages about how long that residual effect lasts, and what other causes of aggressive-inducing effects might be in operation.

There is also a problem as to the most appropriate way to assess aggressiveness. Since it is actually very seldom that individuals in our society tend to act in an overtly aggressive fashion, assessments must be made on the basis of observing very few actual events. An alternative technique is to attempt to assess aggressive or violent tendencies, or attitudes. The presumption here is that if someone develops a mental set which is favourable toward the use of aggression to solve problems, then this is a source for concern, even if the behaviours which might, at some time, accompany such preceptions are not actually observed.

### WHAT IS MEASURED

Researchers have noted that there are no existing measurement techniques, which can be used on the general population, to accurately

## EXHIBIT 41

### AGGRESSIVE ATTITUDES ITEMS

You should not kill someone, if you have the chance, just because they try to rob you of the \$20 you have in your wallet.

If you were a policeman or policewoman, you would solve more crimes by being tough with your suspects and informers, than by being nice.

People usually have to be pushy, aggressive, and tough to be successful in society today.

If someone insults you or cheats you, you should be able to "get back at them" if the police do not do anything.

There are a lot of small time criminals in town who should be beaten up and told to go elsewhere.

If someone teases or insults you without reason, you never hit them or threaten to hit them.

You do not lose your temper very easily.

Even if you had the chance, you would probably not try to kill someone who was trying to kill you.

If you had the chance, you would kill someone who was attempting to rob you.

There are a few crooked people in your neighbourhood, or at work, who you would like to see get "beat up" to teach them a lesson.

It is hard for you to imagine yourself as a thief who robs wealthy people at gunpoint.

You would like to be a member of a neighbourhood protection group which keeps out of the area undesirable people who the police just leave alone for "lack of evidence".

You cannot imagine yourself hurting or killing someone "just for the heck of it".

Every now and then, you get so frustrated that you just feel like "smashing someone".

You have quite a few arguments with people.

You are easy-going until pushed too far, then you explode.

assess the probability of an individual acting, at some time in the future, in a violent manner.<sup>2</sup> The best predictor of future violent behaviour is a record of past violent behaviour.<sup>3</sup>

In the present project, a number of different approaches were taken to the assessment of the respondent's aggressiveness, or aggressive attitudes. The measurement techniques included the following:

- a series of opinion and "probable behaviour" questions which were designed to discriminate between individuals holding aggressive and those holding non-aggressive attitudes;
- a question concerning the respondent's recent involvement in a physical fight;
- a question concerning the respondent's arrest record;
- assessment as to the degree of violence involved in the crime for which the respondent reportedly was arrested;
- a question concerning the arrest record of the respondent's friends;
- assessment of the above record as to the nature of the violence involved in the crimes committed.

### Attitudes

The items used to assess aggressive attitudes are presented in Exhibit 41.

Respondents were asked to give one of the following responses to each of the questions:

- strongly disagree
- disagree
- agree
- strongly agree.

EXHIBIT 42

MENTAL DISORDER AND AGGRESSIVE ATTITUDES

Level of aggressive attitudes	Comparison group	Mental disorder
High	7.5%	13.6%
Medium	22.7	27.3
Low	69.8	59.1
TOTAL	100.0%	100.0%

Note that the questions are worded in such a way that for a respondent to express attitudes which are consistently in the direction of aggressiveness, he or she must give a disagreement response to some questions and an agreement response to other questions. This form of questionnaire construction is a necessary precaution to force the respondent to think about each question before answering it. Otherwise, there is a tendency for respondents to "settle into" the use of one choice and then proceed to use it throughout the questionnaire. Of course, the question reversal technique is also a standard procedure used to eliminate the so-called "agreement set" response pattern.<sup>4</sup>

Each question was scored on a scale of 1 to 4 and then the responses were summed to create a scale score which represented a measure of each individual's aggressive attitudes.

The distribution of responses on this scale were divided into the following 3 categories:

- high aggressiveness (top 10% of the scores)
- moderate aggressiveness (middle 25% of the scores)
- low aggressiveness (remaining 65% of the scores).

#### MENTAL DISORDER

Exhibit 42 indicates that those in the mentally disordered group are more likely to exhibit strong aggressive attitudes than are those in the comparison group.

Another manner in which the mentally disordered group appears to be more inclined toward aggressiveness than the comparison group



EXHIBIT 43

MENTAL DISORDER AND FIGHTING BEHAVIOUR

In the past month, have you had a physical fight with anyone?	Comparison group	Mental disorder
Fought with a stranger	2.8%	2.7%
Fought with a friend	0.4	2.7
Fought with my spouse	0.0	2.8
No fights in the past month	96.8	91.8
TOTAL	100.0%	100.0%

EXHIBIT 44

MENTAL DISORDER AND ARREST RECORDS

Have you ever been arrested?	Comparison group	Mental disorder
Yes	10.3%	19.6%
No	89.7	80.4
TOTAL	100.0%	100.0%

is apparent in Exhibit 43. These data indicate that those in the mentally disordered group were significantly more likely to have been in a physical fight during the past month than those in the comparison group. Note that those in the mentally disordered group were as likely to have fights with strangers as they were with friends or with spouses. The comparison group on the other hand, apparently fights almost exclusively with strangers.

Of course, being involved in a fight is not always one's own fault. It is conceivable that the mentally disordered individuals were simply more frequently forced to defend themselves - perhaps because of their unusual behaviour - than those in the comparison group.

Aside from all possible other explanations, the data in Exhibit 44 suggests that those who engage in anti-social activities such as fighting, are likely to engage in other anti-social activity which eventually attracts the attention of the police. This exhibit indicates that those in the mentally disordered group are significantly more likely to have been arrested than those in the comparison group.

While very few people actually get arrested for committing violent crimes, it is reasonable to consider an arrest record as at least one indication of actual or potential aggressiveness. The point is that an arrest demonstrates some proclivity to engage in anti-social actions. This is an important indicator since one of the primary deterrants against acting in an aggressive manner would seem to be the reluctance of individuals to act in a socially unacceptable manner.

It is important to keep in mind that violence and criminality are not necessarily a function of mental disorder. After all, in relation to the comparison group, the disordered group is younger, less likely to be employed, more likely to have experienced long periods of unemployment, and more likely to be earning a lower income. The interplay of such variables should not be under-estimated. That is, to be unemployed is known to be highly stressful.<sup>5</sup> It is also known that highly stressful circumstances can precipitate a state of mental disorder.<sup>6</sup> Also, low rates of employment may lower one's income to the point where expectations can only be met, or frustrations expressed, through criminal action.

Other researchers have attempted to explore the relationship between mental disorder and the propensity for violence. The findings to date are inconclusive. Some researchers show that mental patients commit more violent crimes than other criminals, other studies show just the reverse.<sup>7</sup> No one has attempted to assess the non-institutionalized mentally disordered - as has been done here - on the assessment of either evidence of aggressive behaviours, or aggressive attitudes.

## MEDIA

The extent to which aggressive attitudes and behaviours are related to exposure to the various media is presented in the following pages.

EXHIBIT 45

TELEVISION VIEWING AND AGGRESSIVE ATTITUDES

Level of aggressive attitudes	Never watch TV	1-2 hours per day	3-4 hours per day	4-5 hours per day	6 or more hours per day
High	8.2%	5.9%	19.6%	11.1%	18.2%
Medium	32.8	24.7	19.6	22.2	33.3
Low	59.0	69.4	60.8	66.7	48.5
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%

EXHIBIT 46

TELEVISION VIEWING AND ENJOYMENT THROUGH AGGRESSION

Media violence has made me realize that I could get more enjoyment out of life if I were a more demanding and aggressive person	Never watch TV	1-2 hours per day	3-4 hours per day	4-5 hours per day	6 or more hours per day
	9.8%	16.4%	24.5%	22.2%	36.4%
	23.0	26.9	31.4	27.8	24.2
	1.6	2.1	3.9	5.6	0.0
	65.6	54.6	40.2	44.4	39.4
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%

EXHIBIT 47

TELEVISION VIEWING AND FIGHTING

In the past month, have you had a physical fight?	2 or less hours per day	4 or more hours per day
Yes	3.35%	7.25%
No	96.65	92.75
TOTAL	100.0%	100.0%



### Attitudes

As Exhibit 20 (opposite Page VI-5) indicates those who watch a lot of television tend to watch a lot of violence. As many researchers have noted, the impact of this media diet may be to increase aggressiveness and/or aggressive attitudes.<sup>8</sup> As Exhibit 45 indicates, those who watch a lot of television are significantly more likely to hold stronger aggressive attitudes than are those who are light viewers of television.

All respondents were asked to identify a violent event in the media which they had seen, and which had disturbed them, a short time before the interview. They were then asked a series of questions about how this particular event affected their attitudes or perceptions. One of the questions they were asked was:

"After seeing and hearing about the violent event,  
I felt that I could get more enjoyment out of life  
if I were a more demanding and aggressive person."

As Exhibit 46 indicates, heavy viewers were significantly more likely to report that they felt this way "more than usual" after seeing the event than did the light viewers.

There were no significant relationship between frequency of media use and aggressive attitudes for any of the other media studied.

### Fighting/Criminality

As Exhibit 47 indicates, heavy television viewers are much more likely to have been involved in a physical fight during the month preceding the interview than were light viewers.

EXHIBIT 48

TELEVISION VIEWING AND ARREST RECORD

Have you ever been arrested?	Never watch TV	1-2 hours per day	3-4 hours per day	4-5 hours per day	6 or more hours per day
Yes	15.0%	10.5%	20.0%	11.1%	30.3%
No	85.0	89.5	80.0	88.9	69.7
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%

EXHIBIT 49

TELEVISION VIEWING AND REPORTS OF FRIENDS BEING ARRESTED

Have any of your friends ever been arrested?	Never watch TV	1-2 hours per day	3-4 hours per day	4-5 hours per day	6 or more hours per day
Yes	55.2%	38.5%	57.0%	55.6%	63.3%
No	44.8	61.5	43.0	44.4	36.7
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%

EXHIBIT 50

TELEVISION VIEWING AND VIOLENCE OF FRIEND'S CRIME

Were the crimes for which a friend was arrested of a violent or non-violent nature?	Never watch TV	1-2 hours per day	3-4 hours per day	4-5 hours per day	6 or more hours per day
Violent crime	11.5%	10.0%	35.4%	27.8%	29.4%
Non-violent crime	88.5	90.0	64.6	72.2	70.6
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%

With respect to personal arrest records, Exhibit 48 indicates that heavy television viewers were significantly more likely to have been arrested than the light viewers.

Respondents were asked to indicate whether or not any of their friends had been arrested, and if so, to specify the nature of the crime. The crimes were then coded as being either violent or non-violent in nature.

As Exhibit 49 indicates, heavy television viewers were more likely than light television viewers to have a friend who had been arrested. Furthermore, as Exhibit 50 indicates, among those who did have friends who had been arrested, the heavy viewers were significantly more likely than the light viewers to have a friend who had been arrested for a violent crime.

There is no relationship between fighting/criminality and media use noted for any of the other media studied in this project.

#### MENTAL HEALTH AND THE MEDIA

In the preceding paragraphs, it has been noted that aggressiveness and aggressive attitudes are characteristic of the mentally disordered group and of those who are heavy television viewers.

Furthermore, in the discriminant analysis which was carried out to identify the personal characteristics which would discriminate between heavy and light television viewers (Exhibit 17, opposite Page VI-3), it was noted that mental disorder was one of the predictors of heavy television viewing.

EXHIBIT 51

ANALYSIS OF VARIANCE:  
AGGRESSIVE ATTITUDES AND TELEVISION VIEWING

Source of variation	df	Mean Square	F	Significance level
A (mental disorder)	1	107.064	3.376	0.064
B (TV viewing)	1	201.752	6.362	0.012
A x B	1	15.149	0.478	0.999
Residual	365	31.713		

MEAN SCORES: AGGRESSIVE ATTITUDES SCALE\*

	Low TV viewing	High TV viewing
Mental disorder	31.887	29.512
Comparison group	32.782	31.464

\*The lower the score, the more aggressive the attitudes.

EXHIBIT 52

ANALYSIS OF VARIANCE:  
AGGRESSIVE ATTITUDES AND MOVIE ATTENDANCE

Source of variation	df	Mean Square	F	Significance level
A (mental disorder)	1	448.214	13.730	0.001
B (movie attendance)	1	75.748	2.320	0.124
A x B	1	157.416	4.822	0.027
Residual	369	32.644		

MEAN SCORES: AGGRESSIVE ATTITUDES SCALE\*

	Low movie attendance	High movie attendance
Mental disorder	31.277	28.631
Comparison group	32.787	33.295

\*The lower the score, the more aggressive the attitudes.



To examine the relationship between mental disorder and television viewing more carefully, the data on aggressive attitudes were subjected to an analysis of variance, using mental disorder and television viewing as the independent variables.

With this technique, it is possible to compare the relative importance or influence of one independent variable against another, with respect to their respective influence on the dependent variable - in this case, scores on the aggressiveness scale. The analysis indicates that there is only one variable - television viewing - which appears to be related significantly to the dependent variable of aggressiveness scale scores. As Exhibit 51 indicates, those who were heavy viewers of television had average scores on the aggressiveness scale which indicated that they held more aggressive attitudes than did those who were light viewers.

In a second analysis of variance, mental disorder was again used as an independent variable and high and low attendance of movie theatres was used as a second independent variable. In this case, as Exhibit 52 indicates, there is a significant effect due to mental disorder, but not to movie attendance, upon the aggressiveness scale score. Furthermore, there is a significant interaction between movie attendance and mental disorder.

As Exhibit 52 indicates, those in the mentally disordered group had stronger aggressive attitudes than those in the comparison group. This is in keeping with the finding that the individuals in the mentally disordered group are more likely to actually engage in aggressive behaviour than are those in the comparison group.

EXHIBIT 53

ANALYSIS OF VARIANCE:  
AGGRESSIVE ATTITUDES AND NEWSPAPER READING

Source of variation	df	Mean Square	F	Significance level
A (mental disorder)	1	141.404	4.313	0.036
B (newspaper reading)	1	43.681	1.332	0.248
A x B	1	21.211	0.647	0.999
Residual	381	32.788		

MEAN SCORES: AGGRESSIVE ATTITUDES SCALE\*

	Low newspaper reading	High newspaper reading
Mental disorder	30.026	31.478
Comparison group	32.276	32.484

\*The lower the score, the more aggressive the attitudes.

The interaction between mental disorder and movie attendance, is particularly interesting. The mean scores in Exhibit 52 indicate that among those who attend movie theatres infrequently, the level of aggressiveness increases only marginally as one moves from the comparison group to the mentally disordered group. However, among those who attend movies frequently, the level of aggressive attitudes among the mentally disordered group are significantly greater than for the comparison group. To put it another way, those who are mentally disordered exhibit significantly stronger aggressive attitudes if they attend movies frequently, rather than infrequently.

Another analysis of variance was carried out, with the dependent variables being frequency of newspaper reading, and mental disorder. In this case, as Exhibit 53 indicates, there once again was a significant effect due to mental disorder. As noted in the previous analysis, the level of aggressiveness was higher among those in the mentally disordered group than those in the comparison group.

## OVERVIEW

In the preceding pages, it was noted that those in the mentally disordered group were more likely, than those in the comparison group, to express strong aggressive attitudes, who have recently been involved in a physical fight, and to have been arrested.

It was also noted that heavy television viewers, but not heavy users of any other medium, were more likely than light television viewers, to express strong aggressive attitudes, to have recently have been in a physical fight, to have been arrested, and to have a friend who had been arrested for a violent crime.

Analyses of variance were carried out on the measure of aggressive attitudes in order to identify any possible interactions between frequency of media use and mental disorder. A significant interaction emerged only between movie theatre attendance and mental disorder. Basically, among those who attend the movie theatres frequently, the level of aggressive attitudes is the same whether one is in the comparison group or the mentally disordered group. However, among those who attend movies frequently, the level of aggressive attitudes among the mentally disordered group is significantly greater than for the comparison group.

## EXHIBIT 54

### ANXIETY/CONCERN ITEMS

The news reports and the police do not tell us about all the crimes that are really happening on the streets of Toronto.

It would be a good idea to just cut back on the money given to the police because we have more protection now than the average person really needs.

The police and the laws in Canada are too tough on criminals.

The police should be given more power.

The way society is going, almost anyone's neighbour nowadays could turn out to be the sort of person the police arrest for some crazy mass killing.

Waiting for a subway or a bus late at night is more dangerous than most people think.

There are a few crazy people around who may try to actually do some of the violent things shown in movies.

People who don't avoid dark streets or disreputable bars, deserve to be robbed or attacked.

Apartment buildings should have well-trained guards by the door who can demand everyone's identification who enters.

EXHIBIT 55

MENTAL DISORDER AND LEVEL OF ANXIETY

Level of anxiety/concern	Comparison group	Mental disorder
High	22.7%	31.4
Medium	39.6	40.9
Low	37.7	27.7
TOTAL	100.0%	100.0%

## VIII - ANXIETY/CONCERN

If one perceives the violence in society as getting "out of hand", and does not feel personally able to cope with it, then some expression of concern or anxiety is to be expected. It is important to distinguish between general feelings of anxiety, which can come from many varied sources, and anxiety which relates specifically to the issue of interest to this project - societal violence and personal safety.

The primary measure of this dimension was to create a scale consisting of several specific attitudinal and "probable" behaviour questions.

The specific items used in this scale are presented in Exhibit 54. As in the construction of the aggressiveness scale (discussed in the preceding chapter) the questions were constructed in such a way that, for some items, an "agreement" response indicates anxiety, while for other items, the obverse is true.

The distribution of scale responses was divided into 3 categories of high, medium, and low. Roughly one-third of the population is included in each of these categories.

### MENTAL DISORDER

Exhibit 55 indicates that individuals who are mentally disordered are more likely to exhibit strong attitudes and perceptions of anxiety and concern about violence in society, than are those individuals in the comparison group.



EXHIBIT 56

MENTAL DISORDER AND MUGGING

Have you ever been mugged?	Comparison group	Mental disorder
Yes	10.5%	20.5%
No	89.5	79.5
TOTAL	100.0%	100.0%

EXHIBIT 57

TELEVISION VIEWING AND ANXIETY

Level of anxiety/ concern	Never watch TV	1-2 hours per day	3-4 hours per day	4-5 hours per day	6 or more hours per day
High	11.5%	23.0%	36.3%	33.3%	42.4%
Medium	42.6	39.3	37.3	55.6	36.4
Low	45.9	37.7	26.4	11.1	21.2
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%

This relationship is not particularly surprising since it is a common characteristic of the mentally disordered to exhibit symptoms of anxiety.

It is interesting to note, however, that perhaps some of the individuals in the mentally disordered group have good reason to express higher-than-average levels of anxiety. After all, as indicated in Exhibit 43, (opposite Page VII-4), the mentally disordered group have been in more fights than those in the comparison group. Also, as noted in Exhibit 56, those in the mentally disordered group are much more likely to have been mugged than those in the comparison group. Such indicators would suggest that those in the mentally disordered group are, as a group, much closer to and aware of violence than perhaps are those in the comparison group.

## MEDIA

As in the case of the discussion of aggressive attitudes, the pattern of media consumption was related to scores on the scale of anxiety/concern.

### Television

Exhibit 57 indicates that heavy viewers of television were significantly more likely to express attitudes which indicated higher levels of anxiety and concern, than did the light viewers.

The respondents were also asked, in reference to a violent event which they had recently seen or heard on media, if they were induced to worry about the terrible things that could happen to them

EXHIBIT 58

TELEVISION VIEWING AND PERSONAL SAFETY

Media violence has made me worry about the terrible things that could happen to me some day	Never watch TV	hours per day			
		1-2	3-4	4-5	6 or more
					per day
More than usual	53.5%	44.4%	30.6%	35.9%	29.4%
Same as usual	32.6	34.1	45.9	42.2	47.1
Less than usual	1.2	1.0	3.1	6.3	0.0
Not at all	12.7	20.5	20.4	15.6	23.5
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%

EXHIBIT 59

MOVIE ATTENDANCE AND ANXIETY

Level of anxiety/ concern	Never attend movies	1-5 movies per year	6-12 movies per year	2-5 movies per month	6 or more movies per month
High	43.0%	30.1%	14.3%	15.6%	17.6%
Medium	45.3	38.3	43.9	37.5	29.5
Low	11.7	31.6	41.8	46.9	52.9
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%

EXHIBIT 60

MOVIE THEATRE ATTENDANCE AND  
WORRIES ABOUT NEIGHBOURHOOD DANGERS

Media violence has made me worry about the fact that my house or city may not be a safe place to live	Never attend movies	1-2 hours per day	3-4 hours per day	4-5 hours per day	6 or more hours per day
More than usual	53.5%	44.4%	30.6%	35.9%	29.4%
Same as usual	32.6	34.1	45.9	42.2	47.1
Less than usual	1.2	1.0	3.1	6.3	0.0
Not at all	12.7	20.5	20.4	15.6	23.5
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%

some day. As Exhibit 58 indicates, heavy viewers were significantly more likely than light viewers to report that this specific media event made them worry about such things "more than usual".

### Movies

Exhibit 59 indicates that there is a significant relationship between the frequency of attending movie theatres and attitudes of anxiety/concern about violence in society.

These data are the reverse of that observed for the relationship between television viewing and anxiety. That is, the data in Exhibit 59 suggest that the more frequently one attends movies, the less likely it is one is to exhibit attitudes of anxiety.

Of those who report that they never attend movies, 43% score in the upper third of the anxiety scale, while 11.6% score in the lowest third of the anxiety scale. The direction of these figures show the direct reversal among those individuals who attend 6 or more movies per year. For example, among the category who attend 6 to 12 movies per year, 41.8% fall into the lowest anxiety category, while only 14.3% fall into the high anxiety category.

All respondents were asked if, with respect to a specific violent event they had seen in the media, if they subsequently worried that their own neighbourhood, or city, could be a dangerous place to live. Exhibit 60 indicates that there is a significant relationship between the respondent's answer to this question and the frequency with which he or she reported attending movie theatres.

EXHIBIT 61

MAGAZINE READING AND ANXIETY

Level of anxiety/concern	Never read magazines	1 magazine per month	2-3 magazines per month	4-5 magazines per month	6 or more magazines per month
High	36.3%	27.1%	25.6%	21.9%	21.2%
Medium	43.7	47.3	36.4	37.0	33.3
Low	20.0	25.6	38.0	41.1	45.5
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%



EXHIBIT 62

ANALYSIS OF VARIANCE:  
CONCERN/ANXIETY AND TELEVISION VIEWED

Source of variation	df	Mean Square	F	Significance level
A (mental disorder)	1	11.044	0.846	0.999
B (TV viewing)	1	183.310	14.047	0.001
A x B	1	3.975	0.305	0.999
Residual	365	13.050		

MEAN SCORES: CONCERN/ANXIETY SCALE\*

	Low TV viewing	High TV viewing
Mental disorder	12.160	10.573
Comparison group	12.610	10.482

\*The lower the score, the more concern/anxiety.

The direction of the relationship is similar to that noted in the previous paragraph. That is, the more frequently the respondent attended the movie theatre, the less likely he or she was to worry "more than usual" about the dangerousness of their neighbourhood or city.

### Magazines

Exhibit 61 indicates that the more magazines one reads, the less likely it is that the respondent will express a high degree of anxiety and concern about violence.

Note that the direction of the relationship here is the same as that noted between frequency of attending movie theatres and position of the anxiety scale.

### MENTAL HEALTH AND THE MEDIA

A series of 3 analyses of variance were carried out. In each case, 1 of the independent variables was mental disorder. This variable was paired respectively with the independent variables of television viewing time, frequency of attendance at movie theatres, and number of newspapers read.

In the analysis of variance involving mental disorder and television viewing, there was only 1 significant effect - that of television viewing. The data presented in Exhibit 62 indicate that those who are heavy viewers of television are significantly more likely to exhibit attitudes of anxiety/concern than are those who are light viewers.

EXHIBIT 63

ANALYSIS OF VARIANCE:  
CONCERN/ANXIETY AND MOVIE ATTENDANCE

Source of Variation	df	Mean Square	F	Significance level
A (mental disorder)	1	51.849	3.611	0.055
B (movie attendance)	1	316.443	22.038	0.001
A x B	1	45.972	3.202	0.071
Residual	369	14.359		

MEAN SCORES: CONCERN/ANXIETY SCALE\*

	Low movie attendance	High movie attendance
Mental disorder	10.818	12.214
Comparison group	11.194	14.295

\*The lower the score, the more concern/anxiety.

EXHIBIT 64

ANALYSIS OF VARIANCE:  
CONCERN/ANXIETY AND NEWSPAPER READING

Source of variation	df	Mean Square	F	Significance level
A (mental disorder)	1	36.634	2.580	1.105
B (newspaper reading)	1	25.448	1.792	0.178
A x B	1	52.479	3.695	0.052
Residual	381	14.202		

MEAN SCORES: CONCERN/ANXIETY SCALE\*

	Low newspaper reading	High newspaper reading
Mental disorder	11.333	11.541
Comparison group	13.569	11.819

\*The lower the score, the more concern/anxiety.

With respect to the analysis which was carried out with the frequency of movie theatre attendance, there was one significant effect - that of movie attendance. As the data on Exhibit 63 indicates, higher levels of anxiety/concern are exhibited by those individuals who attend movies only infrequently.

In the analysis which was carried out with the number of newspapers read and the mentally disordered, there was a significant interaction effect. As Exhibit 64 indicates, the anxiety level was uniformly high for those in the mentally disordered group, whether they read newspapers frequently or not. However, for those individuals who are not mentally disordered, a higher level of anxiety and concern was exhibited by those who read newspapers frequently rather than infrequently.

#### OVERVIEW

In the preceding pages, it was noted that those in the mentally disordered group are more likely, than those in the comparison group, to exhibit stronger feelings of anxiety and concern about violence. It was noted that they may express these attitudes because they are closer to personal violence than are those in the comparison group. That is, the mentally disordered group are more likely, than the comparison group, to have been involved in fights and to have been mugged.

Those who are heavy viewers of television were also found to express a higher level of anxiety and concern about violence. The reverse effect was noted for those who had attended movies frequently and those who were heavy readers of magazines. That is, heavy use of

these media was not associated with higher levels of anxiety and concern about violence.

Analyses of variance were carried out in order to identify any possible interactions between mental disorder and media use. Among newspaper readers it emerged that the mentally disordered individuals exhibited a general high level of anxiety and concern which was not related to frequency of newspaper reading. However, among the comparison group, those who are heavy readers of newspapers exhibited more anxiety and concern than did those who were light readers of newspapers.

EXHIBIT 65

VICTIMIZATION/DEFENSIVENESS ITEMS

Have you ever seriously considered getting a burglar alarm system for your home?

Have you ever seriously considered having a gun or some other weapon to protect yourself in your home?

Before you go to bed in the evening, do you or someone else check to see if the doors and windows are locked?

When you park your car, do you lock the doors?

In Toronto, you should be careful where you walk alone after dark, as some areas of town are quite dangerous.

There would be a lot less crime if the average citizen, who could prove he or she could use a gun, were allowed to carry a gun anywhere they wanted.

People should learn techniques of self-defense.

Walking alone around the main downtown shopping area after midnight is an activity you would recommend as "reasonable and safe" to out-of-town visitors.

You would try to stop, with physical force if needed, a person of your own size and sex from assaulting an elderly, helpless woman.

You leave lights on in your home, to discourage burglars, when you, and the rest of your household, go out for the evening.

You usually avoid going out at night alone because there is a chance you may be attacked.

You sometimes leave a party or a friend's house early because you worry about being attacked on the street late at night.

You try to avoid taking the subways when you are by yourself late at night.

You do not leave much cash in your home or apartment because thieves may break in and take it.

You do not want to carry a gun or some other weapon to protect yourself.

You have learned a few good self-defense tricks by watching television or movies.

## IX - VICTIMIZATION/DEFENSIVENESS

It is important to note that an individual can express anxiety without indicating a clear interest or involvement in taking either corrective or defensive action. That is to say, a person may feel that it is dangerous to ride the subways at night, but go ahead and do it anyway. Or, he or she may feel that the crime rate is too high to justify cutting back on police protection. Nonetheless, this belief need not lead to vigorous lobbying for more police or other actions which would improve or strengthen police protection.

The scale which was constructed to measure anxiety or concern did not include any indication of the response which the respondent felt he or she might or could take.

The items for the victimization/defensiveness scale are presented in Exhibit 65 . All of the items require that the individual indicate a readiness to be inconvenienced in an attempt to avoid being a victim of societal violence.

The scale was constructed in the same manner as other scales previously described - with respect to reversal of items and with respect to the choice of responses available to each person.

### MENTAL DISORDER

On this scale, there were no significant differences between the responses of those in the mentally disordered group and those in the comparison group.



## EXHIBIT 66

### DEFENSIVENESS ITEMS: INDIVIDUAL ANALYSIS

Have you ever seriously considered getting a burglar alarm system for your home?

1. Have one already
2. Got dog just for the purpose
3. Yes
4. No

Have you ever seriously considered having a gun or some other weapon to protect yourself in your home?

1. Have one already
2. Yes
3. No
4. Other (specify)

Before you go to bed in the evening, do you or someone else check to see if the doors and windows are locked?

1. Yes
2. Doors only
3. No

When you park your car, do you lock the doors?

1. Always
2. Valuables inside, in poor areas
3. At night only
4. Never

EXHIBIT 67

MENTAL DISORDER AND OWNING A WEAPON

Considered having a weapon for protection?	Comparison group	Mental disorder
Yes	19.3%	27.4%
No	80.7	72.6
TOTAL	100.0%	100.0%

EXHIBIT 68

TELEVISION VIEWING AND VICTIMIZATION/DEFENSIVENESS

Level of victimization/ defensiveness	Never watch TV	1-2 hours per day	3-4 hours per day	4-5 hours per day	6 or more hours per day
High	13.1%	23.0%	39.2%	47.2%	54.5%
Medium	42.6	36.0	39.2	33.3	21.2
Low	44.3	41.0	21.6	19.5	24.3
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%

EXHIBIT 69

TELEVISION VIEWING AND ATTITUDES OF VICTIMIZATION

Media violence has made me realize that those people who try to be heroes end up getting hurt	Never watch TV	1-2 hours per day	3-4 hours per day	4-5 hours per day	6 or more hours per day
More than usual	16.7%	31.2%	45.0%	41.7%	54.5%
Same as usual	36.7	35.9	36.0	36.1	30.3
Less than usual	3.3	3.4	2.0	2.8	3.0
Not at all	43.3	29.5	17.0	19.4	12.2
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%

However, several items which appear in Exhibit 66, were selected for individual analysis. Differences between the mentally disordered group and the comparison group did emerge with respect to the question concerning ownership of a weapon. As Exhibit 67 indicates, the mentally disordered group were significantly more likely than the comparison group to report that they either already had a weapon or were seriously considering getting one.

## MEDIA

Scores on the victimization/defensiveness scales were also assessed in view of the amount of time the respondents reported spending with each media.

### Television

Exhibit 68 indicates that heavy television viewers are significantly more likely than the light television viewers to score in the upper third of the defensiveness/victimization scales.

Significant differences were also noted among television viewers in their response to the question concerning their feelings immediately after viewing a violent media event. They were asked if, after seeing or hearing about the violent event, they realized that those people who try to be heroes usually end up getting hurt. An individual who was concerned about "getting involved" and generally would be expected to take steps to avoid trouble, would probably agree to this statement. In fact, as Exhibit 69 indicates, heavy viewers were significantly more likely to agree to this statement than were

EXHIBIT 70

MOVIE ATTENDANCE AND VICTIMIZATION/DEFENSIVENESS

Level of victimization/ defensiveness	Never attend movies	1-5 movies per year	6-12 movies per year	2-5 movies per month	6 or more movies per month
High	41.9%	29.1%	20.4%	29.7%	23.5
Medium	40.7	35.0	36.7	34.4	29.4
Low	17.4	35.9	42.9	35.9	47.1
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%

EXHIBIT 71

MOVIE ATTENDANCE AND ATTITUDES OF VICTIMIZATION

Media violence makes me think about the fact that people who try to be heros usually get hurt				
	Never attend movies	1-5 movies per year	6-12 movies per year	2-5 movies per month 6 or more movies per month
More than usual	51.2%	36.5%	18.9%	31.3%
Same as usual	39.5	35.5	36.8	28.1
Less than usual	2.3	1.0	6.4	3.1
Not at all	7.0	27.0	37.9	37.5
TOTAL	100.0%	100.0%	100.0%	100.0%

EXHIBIT 72

MOVIE ATTENDANCE AND PERCEIVED NEED FOR PROTECTION

Media violence made you think about buy- ing better door locks, or getting a weapon, for protection?	Never attend movies	1-5 movies per year	6-12 movies per year	2-5 movies per month	6 or more movies per month
More than usual	36.0%	28.4%	17.5%	21.9%	29.4%
Same as usual	25.6	22.6	22.7	25.0	17.6
Less than usual	0.0	1.0	4.1	1.6	11.8
Not at all	38.4	48.0	55.7	51.5	41.2
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%



light viewers.

### Movies

Exhibit 70 shows a reversal from the findings noted above. That is, this exhibit notes that the more frequently one attends the movie theatres, the less likely it is that scores on the victimization/defensiveness scale will be high.

There were also significant differences in the response to the question concerning the possibility that "heroes usually only end up getting hurt". Exhibit 71 replicates the finding noted above - that is, the more frequently one attends the movies, the less likely it is that this attitude of victimization is endorsed.

Significant differences also emerge with respect to another question which was asked in response to a particular media event. Respondents were asked if "After seeing and hearing about the violent event, I thought about things like buying better door locks, or getting a weapon to protect myself, my family or my property from criminals." Exhibit 72 indicates that the more frequently one attends movies, the less likely one is to be stimulated to purchase protective devices or weapons.

There were no other significant relationships between measures of victimization/defensiveness and the other media studied.

EXHIBIT 73

ANALYSIS OF VARIANCE:  
VICTIMIZATION/DEFENSIVENESS AND TELEVISION VIEWING

Source of variation	df	Mean Square	F	Significance level
A (mental disorder)	1	2.495	0.075	0.999
B (TV viewing)	1	727.446	21.922	0.001
A x B	1	0.019	0.001	0.999
Residual	365			

MEAN SCORES: VICTIMIZATION/DEFENSIVENESS SCALE\*

	Low TV viewing	High TV viewing
Mental disorder	26.141	22.542
Comparison group	26.314	22.661

\*The lower the score, the more victimization/defensiveness.

EXHIBIT 74

ANALYSIS OF VARIANCE:  
VICTIMIZATION/DEFENSIVENESS AND MOVIE ATTENDANCE

Source of variation	df	Mean Square	F	Significance level
A (mental disorder)	1	130.833	3.718	0.052
B (movie attendance)	1	89.989	2.557	0.106
A x B	1	0.041	0.001	0.999
Residual	369	35.192		

MEAN SCORES: VICTIMIZATION/DEFENSIVENESS SCALE\*

	Low movie attendance	High movie attendance
Mental disorder	23.854	25.071
Comparison group	25.052	26.218

\*The lower the score, the more victimization/defensiveness.

## MENTAL DISORDER AND MEDIA

An analysis of variance was carried out with mental disorder as one independent variable, and time of television viewing as the second independent variable. On the victimization/defensiveness scale, there was only one significant effect - that of television viewing. As Exhibit 73 indicates, those in the heavy viewing group show higher levels of anxiety/defensiveness than do those who are in the light viewing group.

A second analysis of variance, which was carried out using frequency of attendance at movie theatres as one of the independent variables, produced one significant finding. In this case, the significant effect was that of mental disorder. As Exhibit 74 indicates, those in the mentally disordered group show more evidence of victimization/defensiveness attitudes than do those in the comparison group.

## OVERVIEW

In the preceding pages, it was noted that there were no differences between the comparison group and the mentally disordered group with respect to attitudes of victimization/defensiveness. There were, however, indications that the mentally disordered were more interested, than were those in the comparison group, in owning a weapon for protection.

Those who were heavy television viewers exhibited significantly stronger attitudes of anxiety and defensiveness than did those who were

light television viewers. The reverse was true with respect to the variable of movie theatre attendance. In this case, it was those who attended movie theatres only infrequently who had the highest levels of anxiety/defensiveness.

EXHIBIT 75

TOLERANCE ITEMS

You have seen so much violence on T.V., in shows and on news reports, that you find yourself getting bored with it all.

We might as well just get used to the fact that the robbery, the attacks, and other violence in our community is just here to stay.

You have your own troubles, so you do not pay much attention anymore to all the killings reported on the news.

Do you think that the government is making too much of a fuss about the violence in our society?

The spread of organized crime in Toronto will soon be controlled and eventually eliminated by police efforts.

## X - TOLERANCE

Frequent exposure to the media usually means frequent exposure to depictions of violence. As other researchers have suggested, an arousing or "attention getting" stimulus can lose its impact with continued exposure. In the case of violence in the media, this may mean that continued exposure to violent content, can lead to apathy, inattention or tolerance toward both media depictions of violence as well as the "real-life" violence with which one might come into contact.

The primary measure of this dimension was to create a scale consisting of opinion statements concerning the acceptability or importance which respondents attached to violence. Additional questions were concerned with how a respondent felt that he or she might act in the fact of violence in their presence.

The specific items used in this scale are presented in Exhibit 75. As in the construction of the other scales (discussed in preceding chapters), the questions were constructed in such a way that, for some items, an "agreement" response indicates tolerance, while in other cases, the obverse is true.

The distribution of scale responses was divided into 3 categories - high, medium, and low. Roughly one-third of the population is included in each of these categories.

## MENTAL DISORDER AND MEDIA

In none of the analyses, except one, was there any indication that scale scores on the tolerance scale were related to either

mental disorder or to the respondent's pattern of television, magazine, newspaper, movie or radio use.

The one analysis which did generate a significant finding was an analysis of variance utilizing, as independent variables, mental disorder and frequency of movie theatre attendance. In this analysis, there was a significant effect on the tolerance scale of movie theatre attendance. As predicted, those who attend movies frequently show a greater level of tolerance for aggression than do those who attend movies infrequently.

Since this is the only single case in which the tolerance scale has emerged as being related to any of the factors being studied, most researchers would be inclined to treat the finding with caution.

With the exception of the single finding noted above, it would be best to conclude that either the scale for measuring tolerance was not very sensitive or that tolerance toward violence is influenced by a myriad of factors - such as humanistic attitudes or general level of emotional sensitivity - which cut across both media use habits and state of mental health.

## OVERVIEW

The single finding with movies does, indeed, support the principle that frequent exposure to media violence is associated with increased tolerance for violence. Certainly, the results of various laboratory studies have demonstrated that, in the short-term, this is certainly the case.<sup>1</sup>



Nevertheless, the weight of the findings in the present study are not really sufficient to provide compelling support for the hypothesis concerning tolerance effects.

## XI - ACCURACY OF PERCEPTIONS

It is in the nature of opinions that there is often no base or value against which the accuracy of an opinion can be judged. For example, two individuals might be in extreme disagreement with respect to whether or not they feel that there are too many murders in Toronto. People may hold differing opinions, whether or not they are aware of all of the "facts" in a situation. After all, how many murders is "too many"?

On the other hand, it is quite possible to compare individuals with respect to the accuracy of their perceptions about certain factual aspects of the environment. That is, irrespective of their opinions, how accurately do the two individuals in question estimate the actual number of murders which have occurred?

It has been noted by other researchers that those who are heavy viewers of television tend to exhibit perceptions which more accurately reflect the world as portrayed on television than the environment in which they actually live.<sup>1</sup>

It is known that the media often over-represents, or over-emphasizes an upper-middle class lifestyle which is unrepresentative of society as a whole. Also, there is an over-representation of individuals involved in law enforcement work. And, there is an over-representation of both the amount of crime being committed as well as an over-representation of the proportion of crime which is violent crime.

EXHIBIT 76

ACCURACY ITEMS: MEDIA VS. REALITY

During any given week in Canada, about how many people out of 100 are involved in some kind of violence? Would you say about one person in 100 or about 10 in 100?

In Canada, what per cent of all crimes are violent crimes - like murder, rape, robbery and aggravated assault? Would you say it is 15% or 25%?

In Canada, about what per cent of all males who have jobs work in law enforcement and crime detection - like policemen, detectives, etc. Would you say it is 1% or 5%?

About what per cent of Canadians who have jobs are professionals or managers - like doctors, lawyers, teachers, proprietors, or other executives? Would you say it is 20% or 25%?

## EXHIBIT 77

### ACCURACY ITEMS: ESTIMATING CRIME

A burglary is an illegal break and entry into a factory, a store, an apartment, or a house. In all of Metropolitan Toronto during 1975, do you think that the number of burglaries recorded by the police during 1975 was: 8,275 or 24,825?

A robbery is a crime which takes place in the presence of the victim and in which property or something of value is taken from that individual by use of force. Which of the following numbers most accurately represents the number of robberies recorded by the police in Metropolitan Toronto during 1975: 973 or 2,918?

In certain cases of assault, a weapon is used and the victim is wounded. Which of the following numbers do you think most accurately represents the number of woundings recorded by the police in Metropolitan Toronto during 1975: 215 or 644?

Which of the following two numbers most accurately represents the number of murders recorded by the police in Metropolitan Toronto during 1975: 24 or 72?

Which of the following two numbers most accurately represents the number of rapes recorded by the police in Metropolitan Toronto during 1975: 102 or 306?

Which of the following two numbers most accurately represents the number of simple assaults (these are attacks upon a victim which do not result in robbery, rape, wounding, or murder) upon individuals which were recorded by the police in Metropolitan Toronto during 1975: 3,969 or 11,906?

In Exhibit 76, the items, and the response choices, given to the respondents are presented. In all cases, the smaller number is more representative of the actual or "real-life" figure, while the larger number is more representative of the "media world" picture.<sup>2</sup> In other words, those respondents who more consistently choose to answer the question with the smaller number are, on the average, are more accurate in their perceptions than those who show a tendency to select the choice with the larger number.

A somewhat different technique was used to judge the individual's level of accuracy with respect to the actual frequency with which crimes are committed. In Exhibit 77, the questions concerning types of crime are presented. The true response to each question was determined through police reports. The respondent was then asked to choose between two numbers - one of which was half again as small as the true number, and the other of which was half again larger than the true number. For example, if the actual number of times a particular crime was reported as 100, then the respondent was given two choices - one of which was 50, and the other one of which was 150.

In scales of this nature, there is no particular interest in an item-by-item analysis, but rather in the total response pattern which can indicate habitual over-estimation or under-estimation of responses. This technique is useful whenever respondents are likely to have widely-varying perceptions of reality or they are likely to have absolutely no idea what a reasonable answer would be, without guidance from suggested choices. For those unfamiliar with techniques of questionnaire design, there is often the feeling that the true response should also be offered as a choice. The result of this inclusion, however, is usually that respondents will "over use" the

EXHIBIT 78

MENTAL DISORDER AND  
PERCEPTIONS OF VIOLENT INVOLVEMENT

Accuracy in estimating people involved in violence	Comparison group	Mental disorder
Accurate estimate	42.7%	31.3%
Over estimate	57.3	68.7
TOTAL	100.0%	100.0%

middle number of any sequence of 3 number choices when they are uncertain as to the correct answer.

In the present project, the inclusion of this middle number would reduce the variability in the response patterns. Also, because of the known response bias which would occur, a spurious level of "accuracy" would emerge.

#### MENTAL DISORDER

On the questions concerning the number of people, out of 100, who are involved in some kind of violence each week in Canada, there were significant differences in the response patterns of the comparison group and the mentally disordered group. As Exhibit 78 indicates, the individuals in the mentally disordered group show a significantly greater tendency to over-estimate the proportion of people involved in violence, than do those in the comparison group.

The above finding is congruent with the differences noted between the mentally disordered group and the comparison group with respect to attitudes concerning anxiety and defensiveness. That is, as Exhibit 55 (opposite VIII-1), indicates, the mentally disordered group tends to see their environment as being more dangerous than do those in the comparison group.

Also, it must be recalled that those in the mentally disordered group are more likely to have been in a physical fight (Exhibit 43, opposite Page VII-4), and to have been arrested (Exhibit 44, opposite Page VII-4), than their counterparts in the comparison group.

EXHIBIT 79

TELEVISION VIEWING AND PERCEPTIONS  
OF NUMBERS OF PEOPLE INVOLVED IN VIOLENCE

Estimates of the number of people involved in violence during the past week	Never watch TV	1-2 hours per day	3-4 hours per day	4-5 hours per day	6 or more hours per day
Under estimation	39.3%	44.8%	32.4%	19.9%	12.9%
Over estimation	60.7	55.2	67.6	80.1	87.1
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%



EXHIBIT 80

TELEVISION VIEWING AND PERCEPTIONS OF VIOLENT CRIME

Estimates of the percentage of crimes which are violent	Never watch TV	1-2 hours per day	3-4 hours per day	4-5 hours per day	6 or more hours per day
Under estimation	55.7%	56.5%	42.2%	52.8%	36.4%
Over estimation	44.3	43.5	57.8	47.2	63.6
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%

The experience of being mugged is also significantly more common among the mentally disordered group than among those in the comparison group (Exhibit 56, opposite Page VIII-2).

In short, those in the mentally disordered group have more personal experience with "real-life" violence than do those in the comparison group. Their attitudes reflect this, and it is not particularly surprising that their perceptions - as noted in Exhibit 78 - reflect this also.

## MEDIA

The accuracy of the respondents' perceptions was also assessed in relation to their media consumption patterns.

### Television

In Exhibit 79, the data show that the frequency of over-estimation of the percentage of people involved in violence during any given week increases dramatically, the more one watches television. This finding is congruent with that observed by other researchers.<sup>3</sup> The principle here is that those who watch a lot of television base their perceptions of reality on the world as portrayed by the media. Since much media content is saturated by depictions of violence, the perceptions of those who spend several hours per day absorbing this "world" are influenced in a predictable manner.

Exhibit 80 indicates a similar finding with respect to the respondents estimates of the percentage of crimes which are violent crimes. Most crimes with which the police must deal are of a non-violent nature. Note however that those who watch 6 or more hours per

EXHIBIT 81

TELEVISION VIEWING AND PERCEPTIONS OF LIFESTYLE

Estimates of the proportion of professionals and managers in Canadian society	Never watch TV	1-2 hours per day	3-4 hours per day	4-5 hours per day	6 or more hours per day
Under estimation	83.6%	72.8%	66.0%	61.1%	60.6%
Over estimation	16.4	27.2	34.0	38.9	39.4
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%

day of television are far more likely to overestimate the percentage of crimes which are violent crimes than are those who watch 2 or less hours of television per day.

Content analyses of television programming has demonstrated that, relative to the socio-economic structure of society, the upper middle class is over represented in television. If heavy television viewers derive their perceptions of reality largely through the media, then it is predicted that they should overestimate the proportion of our society which falls into the upper middle class category.

A previous researcher has approached this issue by asking respondents to estimate the proportion of individuals in society who are professionals or managers.<sup>4</sup> This is the least confusing way to collect information concerning perceptions of social class, since occupation is closely tied to social class differences.

As Exhibit 81 indicates, heavy viewers of television do, indeed, overestimate the proportion of professionals and managers in society. Almost 40% of those who watch television for 6 or more hours a day chose the inaccurate response, whereas only half that proportion of individuals who watch TV for less than an hour a day erred in the direction of overestimation.

Findings discussed above dealt with perceptions of television viewers on specific topics. The responses to the items displayed in Exhibit 76 (opposite page XI-2), were summed to provide average measure of accuracy in perception. The distribution of these summed responses was then divided into thirds so that individuals

EXHIBIT 82

TELEVISION VIEWING AND ACCURACY OF PERCEPTIONS

Accuracy of perceptions about the Canadian level of violence and social fabric	Never watch TV	1-2 hours per day	3-4 hours per day	4-5 hours per day	6 or more hours per day
High	52.5%	48.1%	31.4%	27.8%	21.2%
Moderate	27.9	24.7	39.2	38.9	27.3
Low	19.6	27.2	29.4	33.3	51.5
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%

EXHIBIT 83

ANALYSIS OF VARIANCE: ACCURACY ON  
PERCEPTIONS AND TELEVISION VIEWING

Source of Variation	df	Mean Square	F	Significance level
A (mental disorder)	1	0.221	0.175	0.999
B (TV viewing)	1	22.934	18.151	0.001
A x B	1	5.841	4.623	0.030
Residual	365	1.264		

MEAN SCORES: ACCURACY OF PERCEPTION\*

	Low TV viewing	High TV viewing
Mental disorder	1.617	2.549
Comparison group	1.689	1.964

\*The lower the score, the more accurate the perception.

could be classified as being highly accurate, moderately accurate, or low accurate in their perceptions.

As Exhibit 82 indicates, those who are heavy viewers of television are significantly more likely to fall into the "low accurate" group than are those who are light viewers of television.

#### Other Media

The Chi Square analysis which was used to assess relationships between measurements of perception and media use did not produce any further significant relationships between perceptions and media other than those noted for television. If however one examines only the extremes - high media use and low media use - and analyzes the various summed scores, as opposed to the responses to individual items, some further relationships are noted with respect to movie attendance. These are discussed in the following section.

#### MENTAL HEALTH AND THE MEDIA

An analysis of variance was carried out with mental disorder as one independent variable, and heavy versus light television viewing as the second independent variable.

When the dependent variable is the sum of the responses on the questions concerning accuracy of perceptions, there is a significant effect due to time spent watching television. As Exhibit 83 indicates, those who are heavy viewers of television tend to be more inaccurate in their perceptions than are those who are light viewers of television. This finding replicates those discussed in the preceding section.

EXHIBIT 84

ANALYSIS OF VARIANCE: ACCURACY ON  
PERCEPTIONS AND MOVIE ATTENDANCE

Source of Variation	df	Mean Square	F	Significance level
A (mental disorder)	1	5.806	4.534	0.032
B (movie attendance)	1	0.552	0.431	0.999
A x B	1	0.000	0.000	0.999
Residual	369	1.281		

MEAN SCORES: ACCURACY OF PERCEPTION\*

	Low movie attendance	High movie attendance
Mental disorder	2.047	1.952
Comparison group	1.797	1.705

\*The lower the score, the greater accuracy of perception.



However, the analysis of variance also indicates that there is a statistically significant interaction between the two independent variables of frequency of television viewing and mental disorder.

The interaction indicates that, among light viewers of television there is little difference in the level of accuracy between the comparison group and the mentally disordered group. In fact, as one proceeds from the comparison group to the mentally disordered group, the level of accuracy increases slightly. The direction of this relationship is reversed however for heavy viewers of television. In this case, the level of accuracy decreases as one moves from the comparison group to the mentally disordered group.

The above finding cannot, of course, demonstrate a causal effect. However, the finding is congruent with the hypothesis that not only do heavy viewers of television have a more inaccurate perception of the world than do light viewers, but that there are sub-groups within the population of heavy viewers (in this case, the mentally disordered) who are particularly subject to influence through the media.

A second analysis of variance was carried out utilizing the two independent variables of mental disorder and frequency of movie attendance. The dependent variable - accuracy of perception - was the same as for the analysis discussed above. As Exhibit 84 indicates, there was only one significant finding - that of the effect of mental disorder. In this case, the comparison group indicated a higher level of accuracy of perception than did the mentally disordered group. This finding essentially replicates the

EXHIBIT 85

ANALYSIS OF VARIANCE: ESTIMATING  
CRIME LEVELS AND TELEVISION VIEWING

variation	df	Mean Square	F	Significance level
A (mental disorder)	1	0.219	0.082	0.999
B (TV viewing)	1	13.703	5.147	0.023
A x B	1	0.041	0.015	0.999
Residual	365	2.663		

MEAN SCORES: ESTIMATING CRIME LEVELS

	Low TV viewing	High TV viewing
Mental disorder	3.074	3.549
Comparison group	3.113	3.643

EXHIBIT 86

ANALYSIS OF VARIANCE: ACCURACY ON  
PERCEPTIONS AND MOVIE ATTENDANCE

Source of variation	df	Mean Square	F	Significance level
A (mental disorder)	1	0.002	0.001	0.999
B (movie attendance)	1	12.988	4.943	0.025
A x B	1	0.799	0.304	0.999
Residual	369	2.627		

MEAN SCORES: ESTIMATING CRIME LEVELS

	Low movie attendance	High movie attendance
Mental disorder	3.409	2.845
Comparison group	3.365	3.026

data presented on Exhibit 78 (opposite Page XI-3), which demonstrated that on the specific issue of the number of people involved in violence during any given week, the mentally disordered group were more prone to over-estimate the correct answer than were those in the comparison group.

### Estimation of Crime

The data concerning the over or under estimations of crime were subjected to an analysis of variance with mental disorder as one independent variable and frequency of television viewing as the other independent variable. In this case, there was a significant effect due to the amount of television viewing. As Exhibit 85 indicates, the light viewers of television estimated significantly lower levels of crime than did those who were heavy viewers of television.

A similar analysis of variance was carried out on the same data - but using mental disorder as one independent variable and frequency of movie attendance as the other independent variable. The data, which are presented in Exhibit 86, indicate that there is a significant effect due to frequency of movie attendance. However, the finding is the reverse of that noted above for television viewing. That is, the less frequently one attends movies, the more likely the tendency to over-estimate the amount of criminal activity

This latter finding is congruent with the data discussed earlier concerning levels of anxiety and defensiveness (Chapters 8 and 9, respectively). Generally, the findings suggested that for all media users, other than television viewers, undesirable or uncomfortable attitudes and perceptions were more frequently associated with light users, rather than heavier users of media.

## OVERVIEW

In the preceding pages, it was noted that there were a number of different techniques used to assess the accuracy of the individual's perceptions with respect to the amount of violence in society and with respect to the distribution of certain social roles and income levels in society.

The mentally disordered group are more likely, than the comparison group, to over-estimate the number of individuals involved in violence during any given week.

Heavy television viewers differ from light television viewers in overestimating the number of individuals involved in violence during week, in overestimating the proportion of crimes which are violent crimes, and in overestimating the proportion of individuals in society who are managers or professionals.

An analysis of variance was conducted to examine the possibility of interaction effects between media use and mental disorder. One finding which emerged indicates that among light television viewers, there is no difference between the mentally disordered and the comparison groups with respect to their general level of accuracy. However, among heavy viewers, those in the mentally disordered group show a tendency to be significantly less accurate in their perceptions than do those in the comparison group.

Using as a basis the actual number of crimes reported to the police in Toronto, respondents were given the opportunity to either

overestimate or underestimate the actual number of crimes committed in each of several categories. There were two findings of interest. That is, those who were heavy viewers of television were more likely to overestimate the number of crimes reported than were the light viewers of television. For frequency of movie attendance however, the relationship was reversed. Those who attended movies infrequently were more likely to overestimate the amount of crime reported than were those who attended movies frequently.

## XII - OVERVIEW AND CONCLUSIONS

Are people adversely affected by exposure to depictions of violence in the media? For years, researchers have demonstrated to one another, and to the public at large, that there is no simple answer to such a question.

To date, there seems to be some consensus on at least two points. First, it is clear that there are many short-term adverse effects of media violence. Under the right conditions, exposure can make individuals more aggressive, more fearful, and more accepting of violence done to others.

Second, many people agree that the mentally disordered are particularly likely to develop either undesirable attitudes or behavioural patterns as a result of being exposed to media violence.

### PURPOSE

There is considerable data to support the conclusions concerning the short-term impact of media violence on attitudes and behaviours. There is very little data to support the conclusions concerning the susceptibility of individuals who are mentally disordered.

The purpose of the present study was to examine the media use patterns and the possible media effects among a sample of mentally disordered adults. If these data prove to be significantly different from similar data collected from a sample of adults exhibiting no symptoms of mental disorder then some groundwork would have been laid for design of future research to isolate causal factors. Most important,



such findings would have provided some support for the second point mentioned above - that the mentally disordered individual exhibits a high level of susceptibility to media violence.

#### OUTCOMES

Certainly the mentally disordered group tended to exhibit more aggressive tendencies, stronger attitudes of anxiety/concern, and of victimization/defensiveness than did those individuals in the comparison group. The mentally disordered group were also somewhat less accurate in their perceptions in the amount of violence in society than were those in the comparison group.

It was not at all clear however, that the characteristics associated with mental disorder could be related to amount or type of media use. It did emerge that among both the mentally disordered and the comparison group, heavy use of certain types of media was associated with aggressive tendencies, anxiety, victimization, and various over-estimations or mis-perceptions of the amount of violence in society.

#### Mental Disorder and Media

It should be noted though, that while the mentally disordered group show many of the effects which have been attributed to extensive viewing of media violence, these effects are also symptomatic of mental disorder as a psychological state. In other words, both those in the mental health field and in the legal field would expect the mentally disordered population to exhibit characteristics such as those mentioned above - even before the advent of mass communication facilities such as television, radio, or motion picture theatres.



Also, those in the mentally disordered group do not exhibit media use patterns or preferences which are distinctly different from those in the comparison group. In other words, the fact that those in the mentally disordered group were more aggressive, anxious, defensive, and inaccurate was probably neither a function of an unusually strong preference for crime shows nor a predilection for generally heavier use of the media.

### Predicted Results

In the statistical analyses, mental disorder proved to be one of several variables useful in predicting heavy television use and in predicting light magazine and newspaper use. It should be noted though, that it was always the weakest of a group of predictors. As an isolated variable, it was not significantly related to media use.

There was some limited evidence however, that under certain conditions of heavy media use, those in the mentally disordered group responded differently from those in the comparison group. Specifically, it was presumed that those in the mentally disordered group would be more prone to absorb and believe the portrayals of reality in the media than would those who were not mentally disordered. In fact, among those who watched very little television, there were no differences between those in the mentally disordered group and those in the comparison group with respect to their level of accuracy in perceptions. Among heavy television viewers however, there was - as has been previously noted by other researchers - a decrease in the accuracy of perceptions. In the present study however, it was found that heavy television viewers who were mentally disordered indicated even higher levels of inaccuracy and perceptions than did those television viewers who were in the comparison group.

Thus, with respect to at least the measure of accuracy of perceptions, these data suggest that those in the mentally disordered group show a greater level of susceptibility to influence through heavy television viewing than do those individuals who exhibit no symptoms of mental disorder.

Some further limited support for the relationship between mental disorder and the susceptibility emerged in the analysis of the relationship between aggressive attitudes and attendance at movie theatres. The nature of the findings were very similar to those discussed above. That is, among individuals who attend movie theatres infrequently, there are no differences between the mentally disordered group and the comparison group with respect to aggressive attitudes. However, among those who attend movie theatres frequently, those in the mentally disordered group exhibit stronger aggressive attitudes than do those in the comparison group.

### Interpretation

These findings are congruent with the original proposition that the mentally disordered may be more susceptible to adverse effects of media violence than the comparison group. However, two things must be kept in mind. First, these are relatively isolated findings. They should not for that reason, however, be considered to be accidental or random. They supported the original proposition concerning the susceptibility of those in the mentally disordered group. Furthermore, they are congruent with the findings generated by other researchers in this field. Of course, since many propositions were not supported as predicted, the existing data are strongly suggestive but would in no way be considered conclusive by careful researchers.

A second point to be recalled is that in these findings, it was only frequency of media use that proved to be a relevant variable not the actual amount of media violence consumed. While there is no question that high levels of media use are related to high levels of media violence consumption, the latter variable did not, in itself, prove to be significantly related to any of the other variables of interest.

#### Television Viewing and Media Effects

The data indicate a clear and strong relationship between most of the predicted media effects and heavy use of television. Aggressive attitudes and behaviours, anxiety, defensiveness, and inaccurate perception of certain aspects of society all are characteristic of the heavy television viewer, but not the light television viewer. Other researchers have both suggested and demonstrated such effects to be associated with exposure to media violence.

#### Other Media

A fact of particular interest is that while both newspapers and movies contain considerable violence, heavy users of these media do not show these predicted media effects on attitudes and behaviours. Indeed, when significant relationships do appear, they are the reverse of that noted for television viewers. For example, those who attend movies infrequently exhibit higher levels of anxiety, defensiveness, and inaccurate perceptions than do those who attend movies frequently.

## CONCLUSIONS

Most of the research conducted on the non-institutionalized mentally disordered has been concerned with identifying the percentage of such individuals in the general population, and in collecting demographic and health data.

### The Unknowns

Through contacts with the mentally disordered in psychiatric facilities, correctional institutions, and treatment clinics, professionals in the mental health and/or the legal field have developed a patchwork of opinions concerning the attitudes and behaviours of the mentally disordered individual. Of course, most of those who are mentally disordered never come into contact with the professionals in either of the afore-mentioned fields. Existing opinions of the non-institutionalized mentally disordered individual are based largely upon conjecture, faith, and theoretical constructs.

### Insanity and violence

Individuals who have been judged insane have committed violent and bizarre acts. In some cases, they have been stimulated and inspired by depictions of one or more violent events in the media.

So, some mentally disordered individuals, under certain circumstances, are a threat to the safety and well-being of other individuals. In some cases, the precipitating factor, or the "trigger", appears to have been media violence.

Of course, the facts of the matter are that many individuals, other than those who are mentally disordered, have been known to imitate, or to report being stimulated by, media violence. So, it happens to everybody. But are those who are mentally disordered more susceptible to such influence than average?

### Violence for Everyone

Looking just at the issue of violence and crime for the moment, the data which has been reported by many different researchers over a long period of years suggests that mentally disordered individuals are no more likely to be involved in violent crime than those who exhibit no symptoms of mental disorder.

In the present project, the mentally disordered group and the comparison group showed no significant differences with respect to amount of violence preferred in shows and programs or in the actual level or type of media used.

### The Seriously Disordered

So far, discussion has centred upon the non-institutionalized mentally disordered individual. What about those whose symptoms are so severe that they have been hospitalized? Do they show evidence of susceptibility toward an inculcation, or acting out, of the violence they see in the media?



The detailed data relevant to the above question are presented in a separate project report for this Royal Commission. It was noted that many of the patients in the mental hospital population surveyed were heavy users of the media. However, there was no evidence that these patients were significantly more aggressive, or held more aggressive attitudes, than a comparison group in the general population.

### Summary

To summarize then:

- most researchers have shown that individuals who are mentally disordered are no more likely to be arrested for violent crimes than are those who exhibit no such symptoms of disorder;
- mentally disordered individuals show no inclination to prefer greater amounts of violence in the media, or to show distinctively patterns of media use;
- mentally disordered individuals who are heavy users of the movie media exhibit more aggressive attitudes than those in the comparison group or than those in the mentally disordered group who seldom attend movies;
- mentally disordered individuals who are heavy users of the television media exhibit less accurate perceptions of reality than those in the comparison group or than those mentally disordered individuals who are infrequent viewers of television.

### OTHER EFFECTS

It was postulated that mentally disordered individuals might, in the fact of violence, be made more anxious, more defensive, or more apathetic than those who exhibit no symptoms of mental disorder. Also, if those in the mentally disordered group are more susceptible to media influence, then they may develop a more inaccurate perception of the world than those exhibiting no symptoms of mental disorder.

The few differences which were noted between the mentally disordered and the comparison group on these various measures were seldom related in any systematic way to differences in either media use or media preferences.

That is to say, the individuals in the mentally disordered group exhibited higher levels of anxiety about the safety of their environment than did those in the comparison group. However, insofar as these perceptions did not vary with type or frequency of media use, one could conclude that the differences are no more than an expression of the symptomology of mental disorder.

### Selectivity

It should be kept in mind that there is a considerable degree of selectivity involved in media consumption patterns. Other researchers have shown that, without question, it is remarkably easy to make anxious people considerably more anxious by seating them in a laboratory and asking them to watch a violent film designed to arouse viewers anxieties.

Most important, the film itself is never the major determinant of the reactions observed. The critical issue is the "mental set" of the individual. The same violent film will have very different reactions upon individuals depending upon whether they are told it is an educational film, a real torture scene, or a part which is play-acted for the purpose of moviemaking.

### Mental Readiness

Outside of the laboratory, individuals not only exercise selectivity in the type of media to which they choose to be exposed, but the conditions under which they will seek one sort of exposure or another.

For example, you may be content to attend a "high drama" or social issue movie by yourself, but you may want to go to a comedy with a friend so that you can enjoy yourself more. If you are an anxious person, you may choose not to go to a horror movie at all - until a friend asks you. Thus, one would not necessarily expect mentally disordered individuals to avoid media presentations which were fear arousing, but merely to be perhaps more selective in the conditions and times under which they would select their media fare.

### TELEVISION VIEWING

Heavy television viewers, whether they were mentally disordered or not, exhibited stronger aggressive attitudes, more anxiety, more feelings of victimization and defensiveness, and more inaccuracy in their perceptions than did light television viewers. For the most part, the heavy use of any of the other media was not consistently related to this undesirable pattern of attitudes and perceptions.

What is the cause and what is the effect here? Do viewers become anxious as a result of watching a lot of television? Or, are anxious people afraid to leave their house and, as a consequence, do they watch a lot of television just to fill the time?



This project was not specifically designed to examine the intricacies of cause and effect relationships. On the other hand, given that so much other research has been done in this field, the inferences to be drawn are painfully obvious.

First, there is a conceptual basis for anticipating that certain program content will effect viewers in a particular way. Second, researchers have tested these notions under carefully controlled laboratory conditions.

For example, researchers have demonstrated something that playwrights have always known - that the emotions of viewers can be easily manipulated by applying relatively straightforward techniques of media development and presentation. People can be made more anxious, they can be made more aggressive, they can be made more fearful and defensive. They can even, after repeated exposures to violence, be made more apathetic in the face of real violence.

No research project or projects can incorporate all possible conditions that account for every reasonable alternative. In the short-term, the predicted effects of media violence can be seen to emerge. But for how long? And, if that individual were comfortably at home viewing the same media presentation, and were not aware that he or she was being "studied", would the effects noted in laboratory research, have been observed?

Questions such as these are the reasons why projects such as the present one are done. When people do their television viewing at home - not in the laboratory, and not when they feel they are being

studied - will heavy viewers exhibit the behaviours and attitudes predicted, and noted, in laboratory studies? If they do - and in this project they do - there are a number of alternative interpretations which come to mind:

- first, the finding could be accidental
- second, "those kind of people" (the aggressive, the anxious, the defensive, etc.) are a personality type who are inclined to be heavy viewers of television. In other words, the medium itself does not actually change or affect viewers
- third, heavy television viewers exhibit attitudes and perceptions which are similar to those observed in laboratory manipulations because television programming in the long-term has effects like those noted/predicted in the short-term. Indeed, on what conceptual basis would one really expect the effects to be different?

Which of the above alternatives seem the most reasonable to you? The combination of laboratory research and field research suggests that there is at least some merit in giving serious consideration to the third choice. Most people would probably opt for a combination of two and three. Some people would want to re-phrase the question. The point is, that few people would reject the "media effects" choice outright - and then be prepared to argue that the similarity in findings between the laboratory and field are purely coincidental. Pick an alternative that seems reasonable to you. After all, on issues such as this, data are never "all in" and, indeed, there is seldom agreement as to the appropriate question to ask.

### The Steady Diet

If media effects can be demonstrated to occur in the short-term, is it unreasonable to suggest that heavy viewers of television - those who watch for 28 hours a week or more - are not subjected to similar influences?

Many movies are violent. Why don't those who attend a lot of movies exhibit a similar pattern of attitudes and perceptions as those individuals who watch a lot of television? It is certainly hard to believe that the contents of movies are more benign than television programming. The answer probably lies in the sheer amount of exposure that the heavy users of each medium experience over the course of a week.

### Quarter-time

Four hours a day or more is considered to constitute heavy television use. Fifteen per cent of the survey population falls into this category. This means that they spend 25% of their waking hours - or more - in viewing television.

In contrast, a heavy user of the movie medium attends between 1 1/2 and 2 times per week. That amounts to no more than 2 1/2 to 3 hours per week, or about 3% of the individual's waking hours.

The heavy television viewer then is exposed to media which can be expected to create undesirable attitudes and perceptions again and again - every day of the week. In the movie theatre, the impact may be more intense because of the viewing situation, but it only occurs once or twice a week.

Much is known about selective perception. It is expected that many of the people who are heavy viewers of television possess the behavioural habits and the personality characteristics which are congruent with both programming content and the environmental conditions of the television viewing situation.

The data from the present project certainly do not constitute anything in the way of conclusive evidence that the attitudes and perceptions which differentiate heavy viewers from light viewers are primarily caused by exposure to the medium in question. It would, on the other hand, be extremely naive to imagine that the findings of previous researchers do not suggest that all the elements for justifying a causal, or at least reinforcing, process did not exist.

### Recommendations

The data certainly seem to suggest that, for reasons of mental health and psychological well-being, one might well take the personal decision to avoid excessive consumption of television. Of course, it should be recognized that for many people such a decision would be extremely difficult. Television watching can undoubtedly - as in many leisure time activities - become an ingrained habit which is extremely hard to break.

Of course, to put the situation into perspective, it should be noted that the impact of television does not seem to be so great as to justify labelling excessive television consumption as a clear and present danger to society.

One of the problems in interpreting these data lies in the fact that it is difficult to relate responses on attitudinal scales to actual behaviour. There are, nevertheless, clear implications for both predictive research, and common sense judgement.

At the very least, the issue has quite a bit to do with personal decisions concerning lifestyles and happiness.

## REFERENCES

### SECTION I

1. Soddy, K., and Ahrenfeldt, R. Mental Health and Contemporary Thought. London: Tavistock Publications, 1967, p. 85.
2. Mark, V., and Irving, F. Violence and the Brain. New York: Harper and Row, Publishers, 1970, p. 151.
3. Fraser, John. Violence in the Arts. Cambridge: Cambridge University Press, 1974, p. 9.
- Wolfe, Morris. Keep That Old Nervous System Jumping. Saturday Night. July/August 1976, p. 74-75.
4. Variety. "MPAA Film Ratings 1968-75." November 5, 1975.
5. Based on data from Bureau of Broadcast Measurement and A. C. Nielsen.
- Surgeon General's Scientific Advisory Committee on Television and Social Behavior. Television and Growing Up: The Impact of Televised Violence. Washington, U.S. Government Printing Office, 1972.
- Globe and Mail. What You See Is What You'll Get. Saturday, August 14, 1976.
6. McMurtry, William R. Investigation and Inquiry into Violence in Amateur Hockey. Toronto: Ontario Ministry of Community and Social Services, 1974.
- Smith, Michael D. "The Legitimation of Violence: Hockey Players' Perceptions of their Reference Group Sanctions for Assault." Canadian Review of Sociology and Anthropology. Vol. 12, 1975, p. 72-80.
- Lefkowitz, M.M., Walker, L.P., Eron, L.D., and Huesmann, L.R., "Preference for Televised Contact Sports as Related to Sex Differences in Aggression." Developmental Psychology. Vol. 9, No. 3, 1973, p. 417-420.
7. Jacobs, Lewis. The Rise of the American Film. New York: Teachers College Press, Columbia University, 1968, p. 296-297.
- Haskins, Jack B. "Stories of Violence Get High Readership." Editor and Publisher. Vol. 101, No. 42, 1968, p. 38.
8. Trevelyan, John. What the Censor Saw.



9. Burnet, Mary. The Mass Media in a Violent World. Paris  
UNESCO, 1971.

U.S. Surgeon General's Scientific Advisory Committee on  
Television and Social Behaviour. Cited above.

Canada, Parliament. Senate. Special Committee on Mass Media.  
Report. Vol.3. Good, Bad, or Simply Inevitable?  
(Ottawa, Queen's Printer, 1970).

Television Research Committee, Second Progress Report and  
Recommendations. Leicester University Press, 1969

10. Liebert, R.M., Neale, J.M., and Davidson, E.S. The Early  
Window: Effects of Television on Children and Youth.  
New York: Pergamon, 1973, p.1-3.

Bandura, A. Aggression: A Social Learning Analysis.  
Englewood Cliffs, New Jersey: Prentice-Hall, 1973.

U.S. Surgeon General's Scientific Advisory Committee on  
Television and Social Behavior. Cited above.

## SECTION II

1. Comstock, George. Television and Human Behavior: The Key Studies. Santa Monica: The Rand Corporation, 1975.  
  
Comstock, George and Lindsey, George. Television and Human Behavior: The Research Horizon, Future and Present. Santa Monica, California: The Rand Corporation, 1975.  
  
Liebert, R.M., Neale, J.M., and Davidson, E.S. The Early Window: Effects of Television on Children and Youth. New York: Pergamon, 1973.  
  
Toplin, R. Unchallenged Violence. Connecticut: Greenwood Press, 1975, p. 183.
2. Newsweek. Exorcism Frenzy, February 11, 1974.
3. Time Magazine. Jaws - The Real Thing, June 23, 1975.
4. Weltman, J. "The Independent Television Code on Violence and the Control of Violence in Programmes." European Broadcasting Union Review. Vol. 24, May 1973, p. 28-34.  
  
Steinberg, C. The Communicative Arts. New York: Hastings House, 1970.  
  
Murray, G. Press and Public. Carbondale: Southern Illinois University Press, 1972.  
  
Inglis, R.A. Freedom of the Movies. A Report on Self-Regulation from the Commission on Freedom of the Press. Chicago: 1947.  
  
Criminal Code of Canada. R.S.C. 1970, c.C-34, Sections 159, 163, 164 and 262.  
Customs Tariff Act. R.S.C. 1970, c.C-41, Schedule C. Sections 46 and 50.  
Post Office Act. R.S.C.. 1970, c.P-14, Section 7.  
The Theatres Act. R.S.P. 1970, c.459, as amended.
5. Schur, E. Our Criminal Society. Englewood Cliffs, New Jersey: Prentice Hall Incorporated, 1969.
6. Robinson, J. The Comics: An Illustrated History of Comic Strip Art. New York: Putnam's, 1974.  
  
Thrasher, F.M. "The Comics and Delinquency: Cause or Scapegoat?" Journal of Educational Sociology. Vol. 23, Spring 1949, p. 195-205.



7. Blake, R.A. "Violence: The Price of Good Box Office?"  
America. Vol. 126, 1972, p. 148-151.  
  
Brown, Les. Television: The Business Behind the Box.  
New York: Harcourt Brace Jovanovich, 1971, p. 58-68.  
  
Benson, G., and Engeman, T. Amoral America. Stamford,  
California: Hoover Institution Press, 1975.
8. The National Commission on Causes and Prevention of Violence,  
Statement on Violence in Television Entertainment  
Programs, 1969, p. 5.
9. Globe and Mail. What You See Is What You'll Get.  
Saturday, August 14, 1976.  
  
Dominic, J., and Pearce, M. Trends in Network Prime-Time  
Programming, 1953-1974. Journal of Communications.  
1976, 26, p. 70-80.  
  
Surgeon General's Scientific Advisory Committee on Television  
and Social Behavior. Television and Growing Up: The  
Impact of Televised Violence. Washington, U.S. Govern-  
ment Printing Office, 1972.
10. U.S. Surgeon General's Advisory Committee on Television and  
Social Behavior. Television and Social Behavior:  
Technical Report to the Committee.  
Vol. 1, Media Content and Control.  
Vol. 2, Television and Social Learning.  
Vol. 3, Television and Adolescent Aggressiveness.  
Vol. 4, Television in Day-to-Day Life.  
Vol. 5, Television's Effects: Further Explorations.  
Washington, U.S. Government Printing Office, 1972.  
  
Television Research Committee, Second Progress Report and  
Recommendations. Leicester University Press, 1969,  
p. 38-43.
11. Steinfeld, J. Statement of the Surgeon General Concerning  
Television and Violence. Where Do You Draw The Line?  
Victor Klein, Editor. Brigham Young University Press,  
1974, p. 177, 178.
12. Television Research Committee, Second Progress Report and  
Recommendations. Leicester University Press, 1969,  
p. 38-43.  
  
Burnet, Mary. The Mass Media in a Violent World. Paris,  
UNESCO, 1971.  
  
U.S. Surgeon General's Advisory Committee on Television and  
Social Behavior. Cited above.

13. Surgeon General's Scientific Advisory Committee. Television And Growing Up: The Impact of Televised Violence. Report to the Surgeon General, United States Public Health Service, Washington, D.C. Government Printing Office, 1972.
14. Toplin, R. Unchallenged Violence. Connecticut: Greenwood Press, 1975, p. 183.
15. Liebert, R.M., Neale, J.M., and Davidson, E.S. The Early Window: Effects of Television on Children and Youth. New York: Pergamon, 1973.
16. Comstock, George. Television and Human Behavior: The Key Studies. Santa Monica: The Rand Corporation, 1975.  
  
Comstock, George and Lindsey, George. Television and Human Behavior: The Research Horizon, Future and Present. Santa Monica, California: The Rand Corporation, 1975.
17. Tannenbaum, P. Mass Media and Violence. Washington, U.S. Government Printing Office, 1969, Vol. 9A, p. 47.
18. Liebert, R.M., Neale, J.M., and Davidson, E.S. The Early Window: Effects of Television on Children and Youth. New York: Pergamon, 1973, p. 1-3.
19. Liebert, R.M., Neale, J.M., and Davidson, E.S. The Early Window: Effects of Television on Children and Youth. New York: Pergamon, 1973, p. 1-3.
- Muson, Howard. Media Violence. New York: Harper and Row, 1972, p. 21.
- Robinson, J.P. "TV's Impact on Everyday Life: Some Cross-National Evidence." In U.S. Surgeon General's Scientific Advisory Committee on Television and Social Behavior. Television and Social Behavior. Vol. 4. Television in Day-to-Day Life: Patterns of Use. Washington, U.S. Government Printing Office, 1972.
- Buckley, W. Los Angeles Times. August 16, 1973.

20. Comstock, George. Television and Human Behavior: The Key Studies. Santa Monica: The Rand Corporation, 1975.  
  
Comstock, George and Lindsey, George. Television and Human Behavior: The Research Horizon, Future and Present. Santa Monica, California: The Rand Corporation, 1975.
21. Comstock, George. The Evidence So Far. Journal of Communication 3, 1975, p. 25-34.
22. Priestland, G. The Future of Violence. Bristol: Western Printing Services, 1974, p. 16.  
  
Bailyn, L. Mass Media and Children: A Study of Exposure Habits and Cognent Effects. Psychological Monographs. 1959, 73, p. 1-48.  
  
Shulman, M. The Ravenous Eye. London: Camelot Press, 1973, p. 179.  
  
Williams, R. Communication. London: 1968, p. 106-107.  
  
Glucksmann, A. Violence on the Screen. The British Film Institute Education Department, London, 1971, p. 43.
23. Television Research Committee, Second Progress Report and Recommendations. Leicester University Press, 1969, p. 38-43.
24. Spiegel, A. Miami Herald, January 3, 1973.
25. Shulman, M. The Ravenous Eye. London: Camelot Press, 1973, p. 36.
26. Srole, L., Langner, T.S., Michael, S.T., Opler, M.K., and Rennie, T.A. Mental Health in the Metropolis: The Midtown Manhattan Study. New York: McGraw-Hill, 1962.
27. Abrams, M. and Williams, R. Communication. London: 1968, p.106-107.
28. Ibid.
29. Himmelweit, H. and Glucksmann, A., Violence on the Screen. The British Film Institute, Education Department, London, 1971, p.43.
30. Iglitzin, L. Violent Conflict in American Society. San Francisco: Chandler Publishing, 1972, p. 49.

31. Shaw, I., and Newell, D. Violence on Television. London: British Broadcasting Corporation, 1972, p. 172.
32. Shaw, I., and Newell, D. Violence on Television. London: British Broadcasting Corporation, 1972, p. 138.
33. Langner, T., and Michael, S. Life Stress and Mental Health. London: Ress Press, 1968.
- Leighton, D., Harding, J., Macklin, D., Macmillan, A., and Leighton, A. The Character of Danger. Basic Books, New York: 1963.
- Llewellyn, Thomas E. The prevalence of psychiatric symptoms within an island fishing village. Canadian Medical Association Journal. 1960, 83, p. 197-204.
- Dohrenwend, B.P., and Dohrenwend, B.S. The Problem of Validity in Field Studies of Psychological Disorder. Journal of Abnormal Psychology. 1965, 70 (February) p. 52-69.
34. Raj, D. The Design of Sample Surveys. Toronto: McGraw-Hill, 1972, p. 127.
- Sudman, S. Reducing the Cost of Surveys. Chicago: Aldine Publishing, 1967, p. 40.
- Dohrenwend, B.P., and Dohrenwend, B.S. The Problem of Validity in Field Studies of Psychological Disorder. Journal of Abnormal Psychology. 1965, 70 (February) p. 52-69.
- Gruenberg, E. Review of Mental Health in the Metropolis: The Midtown Manhattan Study. Vol. 1. In Millbank Fund Quarterly, No. 1, January 1963, p. 77-95.

### SECTION III

1. Webster's New World Dictionary. Toronto: Nelson, Foster & Scott Ltd.
2. The Royal Commission on Violence in the Communications Industry. Interim Report, January 1976.
3. Liebert, R.M., Neale, J.M., and Davidson, E.S. The Early Window: Effects of Television on Children and Youth. New York: Pergamon, 1973, p. 1-3.

Bandura, A. Aggression: A Social Learning Analysis. Englewood Cliffs, New Jersey: Prentice-Hall, 1973.

U.S. Surgeon General's Scientific Advisory Committee on Television and Social Behavior. Television and Social Behavior. Vol. 3. Television and Adolescent Aggressiveness. Washington, U.S. Government Printing Office, 1972.

4. Comstock, George. Television and Human Behavior: The Key Studies. Santa Monica: The Rand Corporation, 1975.

Comstock, George and Lindsey, George. Television and Human Behavior: The Research Horizon, Future and Present. Santa Monica, California: The Rand Corporation, 1975.

5. Cline, V.B., Croft, R.G., and Courrier, S. "Desensitization of Children to Television Violence." Journal of Personality and Social Psychology. Vol. 27, 1973, p. 360-365.

Wertham, F. Is T.V. Hardening Us to the War in Vietnam? In Violence and the Mass Media. O. Larsen (Ed.) New York: Harper and Row, 1968.

6. Drabman, R.S., and Thomas, M.H. "Does Media Violence Increase Children's Toleration of Real-Life Aggression?" Developmental Psychology. Vol. 10, No. 3, 1974, p. 418-421.

Thomas, M., and Drabman, R. Toleration of Real Life Aggression as a Function of Exposure to Television Violence and Age of Subject. Merril-Palmer Quarterly. 1975, 21, p. 227-231.



7. Carruthers, M., and Taggart, P. "Vagotonicity of Violence: Biochemical and Cardiac Responses to Violent Films and Television Programmes." British Medical Journal. Vol. 4, 1973, p. 384-389.
- Cline, V.B., Croft, R.G., and Courrier, S. "Desensitization of Children to Television Violence." Journal of Personality and Social Psychology. Vol. 27, 1973, p. 360-365.
8. Globe and Mail. March 14, 1964.
9. Tanner, J. Psychosocial factors as stressor agents. In J. Tanner (Ed.) Stress and Psychiatric Disorder. Oxford: Blackwell Scientific Publishers, 1960.
- Lazarus, Richard S. Psychological Stress and the Coping Process. Toronto: McGraw-Hill Book Company, 1966.
- Appley, M.H., and Trumbull, R. Psychological Stress. New York: Appleton-Century-Crofts, 1967.
10. Paul, G. Insight Versus Desensitization. Stanford, California: Stanford University Press, 1965.
- Guilford, J.P. Response biases and response sets, in Attitude Theory and Measurement. M. Fishbein (Ed.) New York: John Wiley and Sons Inc., 1967, p. 277-281.
11. Lazarus, R. and Alfert, E. The Short-circuiting of threat. Journal of Abnormal and Social Psychology. 1967, 69, p. 195-205.
- Berkowitz, L., and Alioto, J.T., "The Meaning of an Observed Event as a Determinant of its Aggressive Consequences." Journal of Personality and Social Psychology, Vol.28, 1973, p. 206-217.
- Maccoby, E.E., and Wilson, W.C., "Identification and Observational Learning from Films." Journal of Abnormal and Social Psychology, Vol. 55, 1957, p. 76-87.
12. Spielberger, C. Theory and Research on Anxiety, in Anxiety and Behavior. C. Spielberger (ED.) New York: Academic Press, 1966, p. 12-16.
- McGuire, W. The nature of attitudes and attitude change. In The Handbook of Social Psychology, 2nd Edition. G. Lindzey and E. Aronson (Eds.) p. 144, 218.

13. Gerbner, George, and Gross, Larry, Violence Profile No. 6: Trends in Network Television Drama and Viewer Conceptions of Social Reality, 1967-73. Philadelphia, Annenberg School of Communications, University of Pennsylvania: 1974.

Long, M.L., and Simon, R.J., "The Roles and Statuses of Women on Children and Family Television Programs," Journalism Quarterly, Vol. 51, 1974, p. 210-214.

Seggar, J.F., and Wheeler, P., "World of Work in Television: Ethnic and Sex Representation in Television Drama." Journal of Broadcasting, Vol. 17, 1973, p. 210-214.
14. Gerbner, George, "Violence in Television Drama." Cited above.
15. American Psychiatric Association. Diagnostic and Statistical Manual: Mental Disorders. Washington, D.C. Author, 1952.
16. Wolman, B.B. Mental Health and Mental Disorders. Wolman, M.B.B. (Ed.) Handbook of Clinical Psychology. Toronto: Mc-Graw-Hill Book Company, 1965, p. 1127.
17. Boehm, W.W. The Role of Psychiatric Social Work in Mental Health. In A.M. Rose (Editor) Mental Health and Mental Disorder. New York: Norton, 1955, p. 537.
18. Gurin, G., Veroff, J., and Feld, Sheila. Americans view their mental health. New York: Basic Books, 1960.
19. Gurin, G., Veroff, J., and Feld, Sheila. Americans view their mental health. New York: Basic Books, 1960.
20. Hanly, C. Mental Health in Ontario. Toronto: Queen's Printer, 1970.
21. Goldberg, D.P. The Detection of Psychiatric Illness by Questionnaire. Toronto: Oxford University Press, 1972.
22. Ibid.
23. Ibid.
24. Ibid.

#### SECTION IV

1. Bradburn, N.M. The Structure of Psychological Well-being. Chicago: Aldine Publishing Company, 1969.
2. Gruenberg, E. Review of Mental Health in the Metropolis: The Midtown Manhattan Study. Vol. 1. In Millbank Fund Quarterly, No. 1, January 1963, p. 77-95.
3. Nunnaly, J.S. Popular Conceptions of Mental Health. New York: Holt, Rinehart and Winston, 1961.
4. Raj, D. The Design of Sample Surveys. Toronto: McGraw-Hill, 1972, p. 127.  
  
Partan, M. Surveys, Polls and Samples. New York: Cooper Square Publishers, 1966, p. 111.  
  
Deming, W. Some Theory of Sampling. London: Wiley & Sons, 1950, p. 32.  
  
Sudman, S. Reducing the Cost of Surveys. Chicago: Aldine Publishing, 1967, p. 40.
5. Ibid.
6. Dunham, H.W. Social structures and mental disorders: Competing hypotheses of explanation. Causes of mental disorders: A review of epidemiological knowledge, 1959. New York: Milbank Memorial Fund, p. 227-265.  
  
Hollingshead, A.B., and Redlich, F.C. Social class and mental illness. New York: Wiley, 1958.  
  
Hyde, R.W., and Kingsley, L.V. Studies in medical sociology: The relation of mental disorder to the community socioeconomic level. New England Journal of Medicine. 1944, 231, p. 543-548.



## SECTION V

1. Hays, W.L. Statistics for Psychologists. Toronto: Holt, Rinehart and Winston, 1963.  
  
Kerlinger, R.N. Foundations of Behavioral Research. Toronto: Holt, Rinehart and Winston, 1965.
2. Dohrenwend, B.P., and Dohrenwend, B.S. The problem of Validity in Field Studies of Psychological Disorder. Journal of Abnormal Psychology. 1965, 70 (February) p. 52-69.
3. Guilford, J.P. Response biases and response sets, in Attitude Theory and Measurement. M. Fishbein (Ed.) New York: John Wiley and Sons Inc., 1967, p. 277-281.  
  
McGuire, W. The nature of attitudes and attitude change. In The Handbook of Social Psychology, 2nd Edition. G. Lindzey and E. Aronson (Eds.) p. 144, 218
4. Goldberg, D.P. The Detection of Psychiatric Illness by Questionnaire. Toronto: Oxford University Press, 1972.
5. Statistics Canada Population and Housing Characteristics by Census Tract - Toronto. Series B. Table 3. Catalogue Number 95-751.
6. Hollingshead, A.B., and Redlich, F.C. Social class and mental illness. New York: Wiley, 1958.  
  
Hyde, R.W., and Kingsley, L.V. Studies in medical sociology: The relation of mental disorder to the community socioeconomic level. New England Journal of Medicine. 1944, 231, p. 543-548.
7. Fellows, R. Past and Future Trends in Mental Disease. Diseases of the Nervous System, 1944. 5, p. 203-208.  
  
Noyes, A. and Kolb, L. Modern Clinical Psychiatry. Philadelphia: W.B. Saunders Co. 1963.
8. Gurin, G., Veroff, J., and Feld, Sheila. Americans view their mental health. New York: Basic Books, 1960.
9. Goldberg, D.P. The Detection of Psychiatric Illness by Questionnaire. Toronto: Oxford University Press, 1972.
10. Goldberg, D.P. The Detection of Psychiatric Illness by Questionnaire. Toronto: Oxford University Press, 1972.
11. Noyes, A., and Kolb, L. Modern Clinical Psychiatry. Cited above.

## SECTION VI

1. Kilguss, Anne F. Using Soap Operas as a Therapeutic Tool.  
Social Casework, Vol. 55, No. 9 (1974), pp. 529-530.  
  
Marchand, P. T.V. Soap Opera: Death in the Afternoon. Maclean's,  
Vol. 87 (October 1974), p. 106.  
  
Noble, G. Some Comments on the Nature of Delinquents: Identification with Television, Heroes, Fathers, and Best Friends.  
British Journal of Social and Clinical Psychology, Vol. 10 (1971), pp. 172-180.
2. Gerbner, G. and Gross, L. The Scary World of T.V.'s Heavy Viewer.  
Psychology Today. 1976, Vol.9, p.41.
3. Lazarsfeld, P. and Kendall, P. Radio Listening in America.  
New York, Prentice-Hall, 19~~78~~8.
4. Singer, Benjamin and Green, Lindsay. The Social Functions of Radio in a Community Emergency. Toronto, Copp Clark, 1972.

## SECTION VII

1. Bandura, A. Aggression: A Social Learning Analysis. Englewood Cliffs, New Jersey, Prentice-Hall, 1973
2. Megargee, M. The Prediction of violence with Psychological Tests. and C. Spielberger (Ed.), Current Topics in Clinical and Community Psychology. New York: Academic Press, 1970. p. 98.
3. Rapoport, J. (Ed.), The Clinical Evaluation of the Dangerousness of the Mentally Ill. Springfield: Thomas, 1967.  
  
Kozol, E. The Diagnosis and Treatment of Dangerousness. Crime and Delinquency, 1972, 18, P. 371, 383.
4. Guilford, J.P. Response biases and response sets, in Attitude Theory and Measurement. M. Fishbein (Ed.) New York: John Wiley and Sons Inc., 1967. p. 277-281.
5. Fellows, R. Past and Future Trends in Mental Disease. Diseases of the Nervous System, 1944, Vol. 5, p. 203-208.  
  
Inkeles, A. Industrial Man: The Relation of Status to Experience, Perception and Value. American Journal of Sociology, 1960 Vol. 66, p. 1-31.
6. Brown, C., and Birley, J. Crises and Life Changes and the Onset of Schizophrenia. Journal of Health and Social Behavior, 1968, Vol. 9, P. 203-214.  
  
Tanner, J. Psychosocial Factors as Stressor Agents. M. J. Tanner (Ed.), Stress and Psychiatric Disorder. Oxford: Blackwell Scientific Publishers, 1960.
7. Stone, A. Mental Health and the Law: A System in Transition. U.S. Department of Health, Education and Welfare. Washington, D.C.: U.S. Government Printing Office, 1975. P. 27.  
  
J. Rapoport (Ed.) The Clinical Evaluation of the Dangerousness of the Mentally Ill. Cited above.
8. Liebert, R.M., Neale, J.M. and Davidson, E.S. The Early Window: Effects of Television on Children and Youth. New York, Pergamon, 1973.

## SECTION X

1. Cline, V.B., Croft, R.B. and Courrier, S. Desensitization of Children to Television Violence, Journal of Personality and Social Psychology. Vol. 27, No. 3 (1973), pp. 360-365.

Thomas, M. and Drabman, R. Toleration of Real-life Aggression as a Function of Exposure to Television Violence and Age of Subject. Merril-Palmer Quarterly, 1975, 21, P. 227-231.

## SECTION XI

1. Gerbner, G. and Gross, L. The Scary World of T.V.'s Heavy Viewer, Psychology Today, 1976, 9, P. 41.
2. Ibid.
3. Ibid.
4. Ibid.

APPENDIX B

SCREENING INTERVIEW

## APPENDIX B

### SCREENING INTERVIEW

Interviewer # \_\_\_\_ Location \_\_\_\_ Method \_\_\_\_ Date \_\_\_\_ Page # \_\_\_\_

Interviewee: Age \_\_\_\_ Sex \_\_\_\_ Refusal \_\_\_\_ No English \_\_\_\_

1. I am \_\_\_\_\_ of the firm John Renner & Associates. We are conducting research on what people think about violent events that are described on radio and T.V., and in the newspapers, etc. In the last week or two did you see a show or a news report in which something violent happened? For example, people fighting, destruction by earthquakes or a fire, kidnapping .....
2. How did you find out about the event?
3. Would you tell me how you felt immediately after you saw or heard about the event?
4. Do you believe that this event effected you "much more", "much less", or "about the same" as other people?
5. Could you tell me if your feelings stayed with you for a few days or did you forget about the event?
6. The way people react to any situation is often influenced by their state of health. Have you been unusually up or down lately, or have you been feeling as usual?
7. During the past week have you -  
felt more irritable than usual?  
had more difficulty with your eyes?  
not been able to concentrate?  
broken a bone or sprained a muscle?  
felt more down - sad?  
felt your nerves bothering you more?  
had more difficulty than usual in eating?  
felt life is getting too difficult?

We are currently gethering information on the subject of "Violence in the Media" and your opinions and ideas would be of great value. Could we arrange an interview now at your convenience?

APPENDIX C

SURVEY QUESTIONNAIRE



# **CONFIDENTIAL**

A STUDY OF MEDIA and ATTITUDES

Survey Data Collected By:

RENNER & ASSOCIATES

1027 Yonge St., Suite 103  
Toronto, Canada, M4W 2K9

## MEDIA STUDY

EXPERIENCE: We want to study what you think about the incidents you see on T.V., at the movies, or in the newspaper.

VIOLENT EVENTS: In the last little while, did you see a show or a news report where something especially violent happened? For example, you may remember things like people fighting, or someone being kidnapped, or hurt. Or, you might remember the destruction of cities by earthquakes or fires.

WHAT AND WHERE: Write down, in a few words, the event that you remember. Say where you saw it--in the paper, the movies, T.V., or radio Was it something on the news? a T.V. series? a special documentary? What, exactly, was the thing or event you remember?

1A. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2A. FEELINGS AND ACTIONS: Here are some words which describe feelings and actions. Circle the number next to those words that describe how you felt or acted while you were watching, or listening to, or reading about, the violent event.

- |     |  |   |
|-----|--|---|
| (a) | felt absolutely nothing .....                  | 1 |
| (b) | mad .....                                      | 1 |
| (c) | close to tears .....                           | 1 |
| (d) | calm .....                                     | 1 |
| (e) | frustrated .....                               | 1 |
| (f) | amused .....                                   | 1 |
| (g) | excited .....                                  | 1 |
| (h) | felt like leaving the room .....               | 1 |
| (i) | "on-edge" .....                                | 1 |
| (j) | bored .....                                    | 1 |
| (k) | ashamed .....                                  | 1 |
| (l) | kept looking away .....                        | 1 |
| (m) | thrilled .....                                 | 1 |
| (n) | nervous .....                                  | 1 |
| (o) | could not take my eyes away from the picture.. | 1 |
| (p) | upset .....                                    | 1 |
| (q) | disgusted .....                                | 1 |

3A. EFFECTS: After seeing and hearing about the violent event, I

- (a) worried about the terrible things that could happen to me someday (circle the number by your choice on this, and the following questions)

more than usual .....	1
same as usual .....	2
less than usual .....	3
not at all .....	4

3A. EFFECTS: After seeing and hearing about the violent event, I

- (b) worried that my own neighbourhood, or city, could be a dangerous place to live

more than usual .....	1
same as usual .....	2
less than usual .....	3
not at all .....	4

- (c) thought about the fact that nobody can really do anything about most of the terrible things happening in the world

more than usual .....	1
same as usual .....	2
less than usual .....	3
not at all .....	4

- (d) realized that those people who try to be heroes usually end up getting hurt

more than usual .....	1
same as usual .....	2
less than usual .....	3
not at all .....	4

- (e) thought about things like buying better door locks, or getting a weapon, to protect myself, my family, or my property from criminals

more than usual .....	1
same as usual .....	2
less than usual .....	3
not at all .....	4

- (f) felt that I could get more enjoyment out of life if I were a more demanding and aggressive person

more than usual .....	1
same as usual .....	2
less than usual .....	3
not at all .....	4

MEDIA USE: Now I would like to ask you about your preference in movies, television, and the other media.

1B. T.V.: How many hours a day do you watch T.V.?

never .....	1
1-2 hours .....	2
3-4 hours .....	3
4-5 hours .....	4
6 or more .....	5

2B. During the past six months, what shows have you watched regularly on T.V.? (LIST)

---

---

---

---

3B. MOVIES: How often do you go to movie theatres?

never .....	1
1-5 per year .....	2
6-12 per year .....	3
2-5 per month .....	4
6 per month or more .....	5

4B. What sort of movies do you like to go to most? Can you write down the names of those movies you liked?

---

---

---

---

5B. NEWSPAPERS: How often do you read a newspaper?

never .....	1
1-3 per month .....	2
1-2 per week .....	3
3-5 per week .....	4
6 per week or more .....	5

6B. Do you prefer any special sections?

---

---

---

7B. Which newspaper do you usually read?

Toronto Star .....	1
Sun .....	2
Globe and Mail .....	3
Other (specify) .....	4

8B. MAGAZINES: How often do you read magazines?

never .....	1
1 per month .....	2
2-3 per month .....	3
4-5 per month .....	4
6 per month or more .....	5

9B. Which magazines do you usually read?

---

---

---

---

---

10B. RADIO: How many hours a day do you listen to the radio?

never .....	1
under 1 hour .....	2
1-2 hours .....	3
3-4 hours .....	4
5 hours or more .....	5

11B. What types of programs do you listen to most often?

rock music .....	1
middle of the road music, or country music ..	2
news programs .....	3
sports .....	4
other (specify) .....	5

INDIVIDUAL: These questions are important because they will help us understand the characteristics of people participating in this study.

1C. EMPLOYMENT: Are you employed (for pay) at the present time?

Employed Full-Time (35 hrs. wk. or more) .....	1
Employed Part-Time .....	2
Unemployed, and looking for full time work .....	3
Not employed, looking for part-time work .....	4
Not employed, and not looking for work .....	5

2C. (If employed) What kind of work do you do?

---

---

---

---

---

3C. (If employed or looking for full-time work) How many weeks during the past twelve months have you been out of work either because of being unemployed or laid-off?

less than 1 week .....	1
1 to 3 weeks .....	2
4 to 8 weeks .....	3
9 to 25 weeks .....	4
over 6 months .....	5

4C. (If unemployed or laid-off) How many weeks has it been since you were last employed?

less than 1 week .....	1
1 to 3 weeks .....	2
4 to 8 weeks .....	3
9 to 25 weeks .....	4
over 6 months .....	5

5C. What kind of job were you doing?

---

---

---

---

6C. Are you presently a:

Full time student (during school year) .....	1
Full time housewife or househusband .....	2
Retired .....	3
Ill or disabled .....	4
None of the above .....	5
Other (Specify) .....	6

1D. SOCIAL/LEISURE: Would you like to see your friends:

more than you do now .....	1
about the same as now .....	2
less than now .....	3

- 2D. Think for a moment about those people, including relatives, whom you consider to be really close friends - those whom you can talk to about serious or important things. How many of these friends would you say you have?

none .....	1
1 .....	2
2 .....	3
3 to 4 .....	4
over 4 .....	5

- 3D. During the past week, how did you spend your time when you were not employed, or travelling to and from work? Please estimate the hours spent in the following activities.

(a) watching television .....	hours	_____
(b) listening to radio .....	hours	_____
(c) going to movies .....	hours	_____
(d) indoor games (cards, checkers) .....	hours	_____
(e) home entertainment (parties, dinners) .....	hours	_____
(f) outside entertainment (clubs) .....	hours	_____
(g) observing sporting events (live) .....	hours	_____
(h) participating in sports .....	hours	_____
(i) reading .....	hours	_____
(j) home repair .....	hours	_____
(k) household (cleaning, cooking) .....	hours	_____
(l) hobbies (please say what) .....	hours	_____
(m) shopping .....	hours	_____
(n) listening to record player or stereo..	hours	_____
(o) other .....	hours	_____

- 1E. FAMILY: What is your marital status?

Married .....	1
Common-law marriage .....	2
Widowed .....	3
Temporary/casual separation .....	4
Legal separation .....	5
Divorced .....	6
Single .....	7

- 2E. (Unmarried) Do you go out on dates, or otherwise entertain members of the opposite sex?

Yes, usually with the same person .....	1
Yes, with several different people .....	2
Yes, but very seldom .....	3
No, not really interested .....	4
Other (specify) .....	5



3E. How many people (include yourself, other adults, children and infants) live in your house, apartment, or rented room?

Number is \_\_\_\_\_

1F. AGE: What age were you on your last birthday?

18 to 24 years .....	1
25 to 34 years .....	2
35 to 44 years .....	3
45 to 54 years .....	4
55 to 64 years .....	5
65 and over .....	6

1G. SCHOOL: How much formal schooling have you had?

Grade school or less .....	1
Some high school .....	2
Completed high school .....	3
Some college or university .....	4
Other post high school training (trade school) ...	5
Completed community college .....	6
Completed university .....	7
Some post graduate work .....	8
Completed post graduate degree .....	9

1H. INCOME: In 1975, how much money did you make, before taxes and other deductions.

Up to \$4,000 .....	1
\$ 4,001 to \$ 6,000 .....	2
\$ 6,001 to \$ 8,000 .....	3
\$ 8,001 to \$10,000 .....	4
\$10,001 to \$14,000 .....	5
\$14,001 to \$18,000 .....	6
\$18,001 to \$22,000 .....	7
\$22,001 to \$26,000 .....	8
\$26,001 or over .....	9

2H. If married, what was the total family income for the year 1975, before taxes and other deductions.  
(Circle the appropriate number above)

1I. RACE: What is your racial origin?

Asiatic .....	1
Negro .....	2
Caucasian .....	3
East Indian .....	4
Other (specify) _____	5



1J. HOUSING: What sort of accommodations do you have?  
Do you live in:

Detached house .....	1
Duplex or row house .....	2
Apartment or condominium .....	3
Rooming house .....	4
Other (specify) .....	5

2J. How many rooms do you have in your living quarters, not counting the bathroom? Count a space as a room only if it is separated from other rooms by a floor-to-ceiling wall or partition.

Number of rooms .....

1K. SEX:

Female .....	1
Male .....	2

L1. SAFETY: Have you ever seriously considered getting a burglar alarm system for your home?

have one already .....	1
got dog <u>just</u> for purpose .....	2
yes .....	3
no .....	4

L2. Have you ever seriously considered having a gun or some other weapon to protect yourself in your home?

have one already .....	1
yes .....	2
no .....	3
other (specify) .....	4

L3. Before you go to bed in the evening, do you or someone else check to see if the doors and windows are locked?

yes .....	1
doors only .....	2
no .....	3

L4. When you park your car, do you lock the doors?

always .....	1
valuables inside, in poor areas .....	2
at night only .....	3
never .....	4

EVENTS: In each of the following questions, always circle just one of the two possible choices offered.

L5. During any given week in Canada, about how many people out of 100 are involved in some kind of violence? Would you say about one person in 100 or about 10 in 100?

1 in a 100 ..... 1    10 in a 100 ..... 2

L6. In Canada, what percent of all crimes are violent crimes - like murder, rape, robbery and aggravated assault? Would you say it is 15% or 25%?

15% ..... 1    25% ..... 2

L7. In Canada, about what percent of all males who have jobs work in law enforcement and crime detection - like policemen, detectives, etc. Would you say it is 1% or 5%?

1% ..... 1    5% ..... 2

L8. About what percent of Canadians who have jobs are professionals or managers - like doctors, lawyers, teachers, proprietors, or other executives? Would you say it is 20% or 25%?

20% ..... 1    25% ..... 2

L9. A burglary is an illegal break and entry into a factory, a store, an apartment, or a house. In all of Metropolitan Toronto during 1975, do you think that the number of burglaries recorded by the police during 1975 was:

8,275 ..... 1  
24,825 ..... 2

L10. A robbery is a crime which takes place in the presence of the victim and in which property or something of value is taken from that individual by use of force. Which of the following numbers most accurately represents the number of robberies recorded by the police in Metropolitan Toronto during 1975:

973 ..... 1  
2,918 ..... 2

L11. In certain cases of assault, a weapon is used and the victim is wounded. Which of the following numbers do you think most accurately represents the number of woundings recorded by the police in Metropolitan Toronto during 1975:

215 ..... 1  
644 ..... 2

L12. Which of the following two numbers most accurately represents the number of murders recorded by the police in Metropolitan Toronto during 1975:

24	.....	1
72	.....	2

L13. Which of the following two numbers most accurately represents the number of rapes recorded by the police in Metropolitan Toronto during 1975:

102	.....	1
306	.....	2

L14. Which of the following two numbers most accurately represents the number of simple assaults (these are attacks upon a victim which do not result in robbery, rape, wounding, or murder) upon individuals which were recorded by the police in Metropolitan Toronto during 1975:

3,969	.....	1
11,906	.....	2

M1. INVOLVEMENT: Have you, or anyone you know, ever been mugged, robbed, or attacked on the street?

(1)	yes, me .....	1
(2)	yes, other person .....	2
(3)	no .....	3

M2. Has your home, or the home of anyone you know, ever been broken into by thieves or delinquents?

(1)	yes, my home .....	1
(2)	yes, other person's home .....	2
(3)	no .....	3

M3. Have you had a physical fight during the past month with anyone?

(1)	yes, stranger .....	1
(2)	yes, friend .....	2
(3)	yes, spouse .....	3
(4)	no .....	4

M4. Have you ever been arrested?

Yes	.....	1
No	.....	2

M5. (If yes) What were you charged with?

Do not wish to say ..... 1

Write here: \_\_\_\_\_ 2

M6. Have any of your friends ever been arrested?

Yes ..... 1

No ..... 2

M7. (If yes) What were they charged with?

Do not wish to say ..... 1

Write here: \_\_\_\_\_ 2

OPINIONS: Different people seem to have very different opinions on how dangerous, or how safe, our community is. We have heard people say things like you will read below. If you agree very strongly with the statement, circle the "SA" under the statement. If you agree, but not too strongly, circle the "A". If your opinion is one of mild disagreement, circle the "D". If you strongly disagree, circle the "SD".

For example, suppose one of the statements were:

"The instructions for this questionnaire are hard to understand"

(1) SA            (2) A            (3) D            (4) SD

I hope that you would circle the SD to show that you strongly disagree.

Remember then:

Strongly agree        =    SA

Somewhat agree       =    A

Somewhat disagree   =    D

Strongly disagree    =    SD

N1. OPINION STATEMENTS: The news reports and the police do not tell us about all the crimes that are really happening on the streets of Toronto.

(1) SA            (2) A            (3) D            (4) SD

N2. You have seen so much violence on T.V., in shows and on news reports, that you find yourself getting bored with it all.

(1) SA            (2) A            (3) D            (4) SD

N3. We might as well just get used to the fact that the robbery, the attacks, and other violence in our community is just here to say.

(1) SA            (2) A            (3) D            (4) SD

N4. You should not kill someone, if you have the chance, just because they try to rob you of the \$20 you have in your wallet.

(1) SD            (2) D            (3) A            (4) SA

N5. In Toronto, you should be careful where you walk alone after dark, as some areas of town are quite dangerous.

(1) SA            (2) A            (3) D            (4) SD

N6. You have your own troubles, so you do not pay much attention anymore to all the killings reported on the news.

(1) SA            (2) A            (3) D            (4) SD

N7. If you were a policeman or policewoman, you would solve more crimes by being tough with your suspects and informers, than by being nice.

(1) SA            (2) A            (3) D            (4) SD

N8. People should learn techniques of self-defense.

(1) SA            (2) A            (3) D            (4) SD

N9. Do you think that the government is making too much of a fuss about the violence in our society?

(1) SA            (2) A            (3) D            (4) SD

N10. There would be a lot less crime if the average citizen, who could prove he or she could use a gun, were allowed to carry a gun anywhere they wanted.

(1) SA            (2) A            (3) D            (4) SD

N11. It would be a good idea to just cut back on the money given to the police because we have more protection now than the average person really needs.

(1) SD            (2) D            (3) A            (4) SA

N12. The police and the laws in Canada are too tough on criminals.

(1) SD            (2) D            (3) A            (4) SA

N13. People usually have to be pushy, aggressive, and tough to be successful in society today.

(1) SA            (2) A            (3) D            (4) SD

N14. The police should be given more power.

(1) SA            (2) A            (3) D            (4) SD

N15. If someone insults you or cheats you, you should be able to "get back at them" if the police do not do anything.

(1) SA            (2) A            (3) D            (4) SD

N16. Waiting for a subway or a bus late at night is more dangerous than most people think.

(1) SA            (2) A            (3) D            (4) SD

N17. Walking alone around the main downtown shopping area after midnight is an activity you would recommend as "reasonable and safe" to out-of-town visitors.

(1) SD            (2) D            (3) A            (4) SA

N18. There are a lot of small time criminals in town who should be beaten up and told to go elsewhere.

(1) SA            (2) A            (3) D            (4) SD

N19. The spread of organized crime in Toronto will soon be controlled and eventually eliminated by police efforts.

(1) SD            (2) D            (3) A            (4) SA

N20. The way society is going, almost anyone's neighbour nowadays could turn out to be the sort of person the police arrest for some crazy mass killing.

(1) SA            (2) A            (3) D            (4) SD

N21. There are a few crazy people around who may try to actually do some of the violent things shown in movies.

(1) SA            (2) A            (3) D            (4) SD

N22. The murders and fights and other violence seen on T.V. and movies probably cause people to be more violent than they otherwise would be.

(1) SD            (2) D            (3) A            (4) SA

N23. People who don't avoid dark streets or disreputable bars, deserve to be robbed or attacked.

(1) SA            (2) A            (3) D            (4) SD

N24. Apartment buildings should have well-trained guards by the door who can demand everyone's identification who enters.

(1) SA            (2) A            (3) D            (4) SD

ACTIONS: The following statements refer to actions some people do, or believe they may do. Using the same system of circling letters as before, show if you agree or disagree that you act in the way described in each statement. Remember:

Strongly agree	=	SA
Somewhat agree	=	A
Somewhat disagree	=	D
Strongly disagree	=	SD

01. ACTION STATEMENTS: You would try to stop, with physical force if needed, a person of your own size and sex from assaulting an elderly, helpless woman.

(1) SD            (2) D            (3) A            (4) SA

02. If someone teases or insults you without reason, you never hit them or threaten to hit them.

(1) SD            (2) D            (3) A            (4) SA



03. You leave lights on in your home, to discourage burglars, when you, and the rest of your household, go out for the evening.

(1) SA            (2) A            (3) D            (4) SD

04. You do not worry about being robbed when you are carrying a large amount of cash.

(1) SD            (2) D            (3) A            (4) SA

05. You usually avoid going out at night alone because there is a chance you may be attacked.

(1) SA            (2) A            (3) D            (4) SD

06. You sometimes leave a party or a friend's house early because you worry about being attacked on the street late at night.

(1) SA            (2) A            (3) D            (4) SD

07. You try to avoid taking the subways when you are by yourself late at night.

(1) SA            (2) A            (3) D            (4) SD

08. You do not leave much cash in your home or apartment because thieves may break in and take it.

(1) SA            (2) A            (3) D            (4) SD

09. You do not want to carry a gun or some other weapon to protect yourself.

(1) SD            (2) D            (3) A            (4) SA

010. You have learned a few good self-defense tricks by watching television or movies.

(1) SA            (2) A            (3) D            (4) SD

011. You do not lose your temper very easily.

(1) SD            (2) D            (3) A            (4) SA

012. Even if you had the chance, you would probably not try to kill someone who was trying to kill you.

(1) SD            (2) D            (3) A            (4) SA



013. If you had the chance, you would kill someone who was attempting to rob you.

(1) SA            (2) A            (3) D            (4) SD

014. There are a few crooked people in your neighbourhood, or at work, who you would like to see get "beat up" to teach them a lesson.

(1) SA            (2) A            (3) D            (4) SD

015. It is hard for you to imagine yourself as a thief who robs wealthy people at gunpoint.

(1) SD            (2) D            (3) A            (4) SA

016. You would like to be a member of a neighbourhood protection group which keeps out of the area undesirable people who the police just leave alone for "lack of evidence".

(1) SA            (2) A            (3) D            (4) SD

017. You cannot imagine yourself hurting or killing someone "just for the heck of it".

(1) SD            (2) D            (3) A            (4) SA

018. Every now and then, you get so frustrated that you just feel like "smashing someone".

(1) SA            (2) A            (3) D            (4) SD

019. You have quite a few arguments with people.

(1) SA            (2) A            (3) D            (4) SD

020. You are easy-going until pushed too far, then you explode.

(1) SA            (2) A            (3) D            (4) SD

021. You have more trouble with your "nerves" than most people.

(1) SA                      (2) A                      (3) D                      (4) SD

HEALTH ATTITUDES: During the last year or so, do you feel that you should have consulted someone about your:

Q1. Physical Health (M.D., surgeon)

Yes, should have .....	1
Yes, actually did .....	2
No .....	3

Q2. Mental Health (psychiatrist, psychologist)

Yes, should have .....	1
Yes, actually did .....	2
No .....	3

Q3. Family Problems (social worker, minister)

Yes, should have .....	1
Yes, actually did .....	2
No .....	3







